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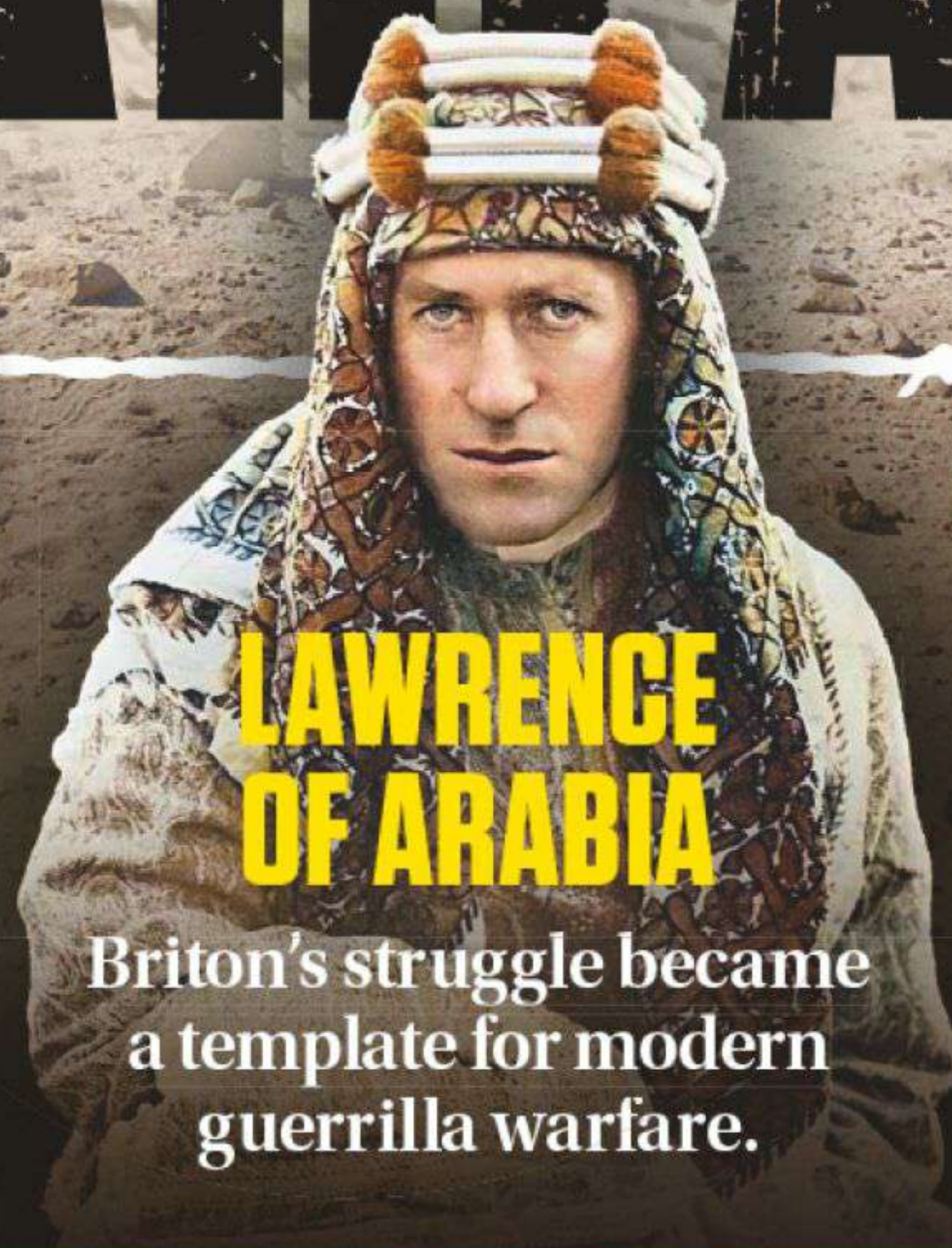
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## 20TH CENTURY DESERT WARFARE



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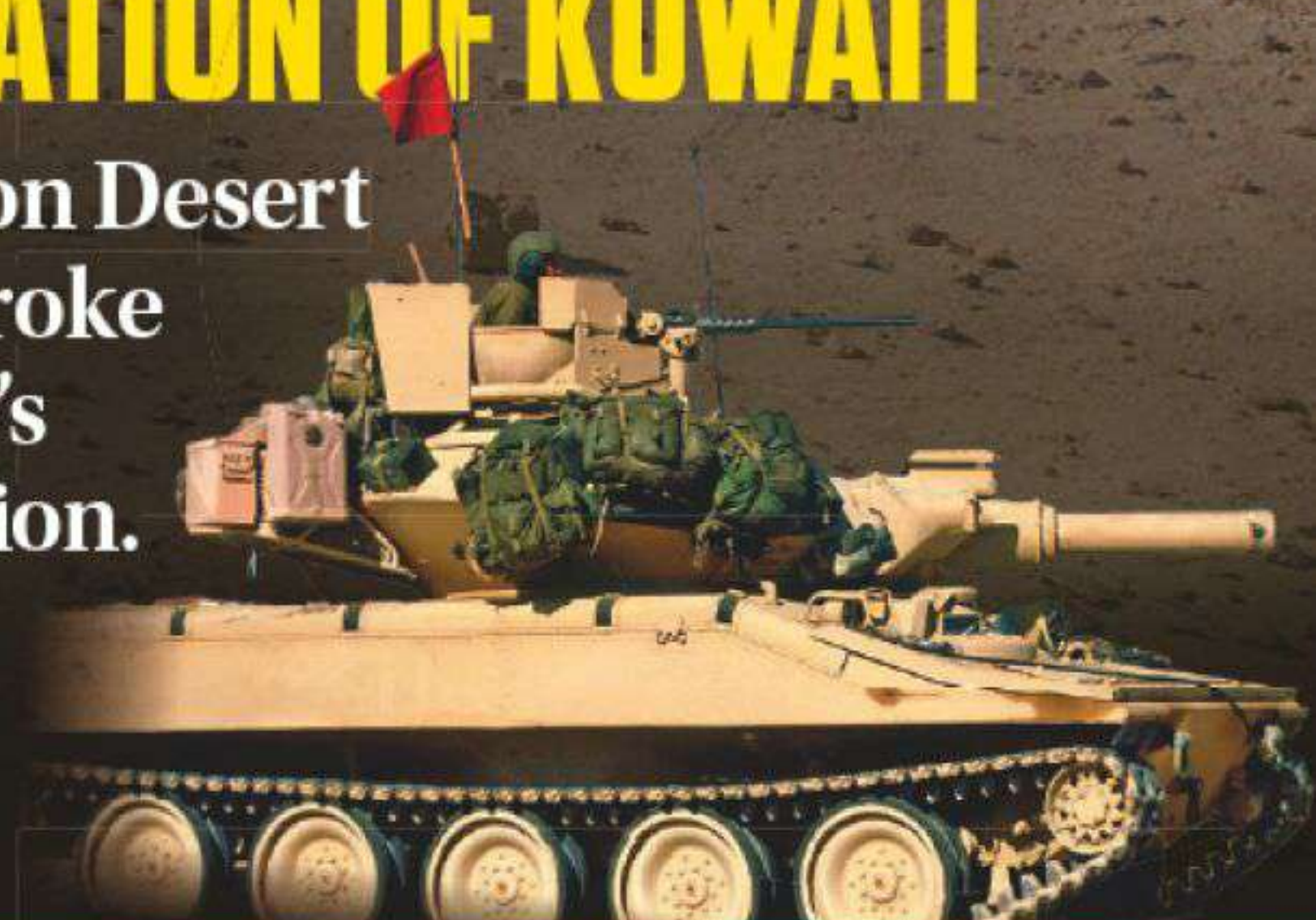


### LAWRENCE OF ARABIA

Britain's struggle became a template for modern guerrilla warfare.

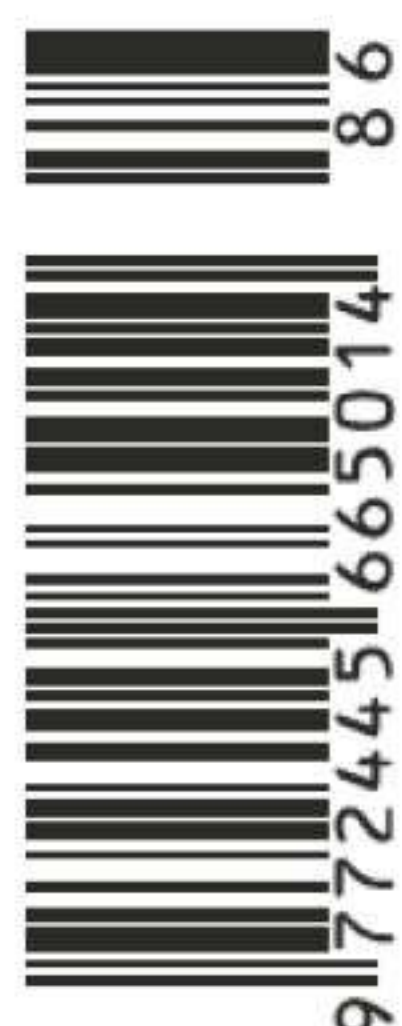
### LIBERATION OF KUWAIT

Operation Desert Storm broke Saddam's occupation.



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# 20TH CENTURY DESERT WARFARE

## CONTENTS

- 4 Lawrence of Arabia  
1914-1918**
- 12 Kut al-Amara  
1915-1916**
- 18 Erwin Rommel 1942**
- 28 Desert War in the air  
1941-1943**
- 38 El Alamein 1942**
- 58 Battle of Kasserine Pass  
1943**
- 66 Long Range Desert Group  
1939-1945**
- 74 Six-Day War 1967**
- 94 Toyota War 1987**
- 102 Operation Desert Storm  
1990-1991**

## Battling both sand and heat

**W**aging war in the desert presents specific challenges that are different from other theatres of war. Perhaps the most obvious is the sand. The tiny gritty grains find their way into everything: engines, weapons and soldiers' eyes. The abundance of sand means that vehicles and troops must be camouflaged with the same colour scheme, as the terrain lacks

suitable cover. The barren landscape also means that there are no landmarks to navigate by, which requires further adaptations.

**“And to top it all off, you have an enemy to defeat”**

In addition, the mobility of the entire army is limited due to the lack of decent roads. Transporting supplies becomes a logistical nightmare. And the soldiers will feel thirsty, with no access to water. Not to mention the extreme temperature changes between night and day. And to top it all off, you have an enemy to defeat.

In this special issue, we've collected selected articles on the history of desert warfare in the 20th century, from TE Lawrence's guerilla tactics on horseback in World War I to the US's high-tech invasion of Kuwait with Operation Desert Storm in 1991.

**Enjoy the issue!**

US B-25 bombers take off from Berteaux air base in Algeria, 12th February 1943.



## Legendary desert warrior

# LAWRENCE OF ARABIA

**British adventurer and officer TE Lawrence fought for a free Arab empire during World War I. His tactics in the desert skirmishes became a template for modern irregular warfare.**

Text: **NICLAS SENNERTEG**

**T**he lone Arab sitting in the middle of the desert was a curious sight in the rain. So thought the Turkish soldiers on the transport train that chugged slowly southwards through what is now Jordan towards the troubled Arabian Peninsula.

The soldiers were reinforcements for the Ottoman troops who had run into difficulties in taking cruel revenge on the South Arabian tribes who'd rebelled against the Turkish rulers in the middle of a burning world war. The rain-soaked figure who waved with embarrassment at the passing train was taken for a harmlessly stupid peasant, and soon the crude jokes flowed about what the man was really doing as he squatted and stared.

Little did the Turks on the train realise that by a twist of fate they had escaped being blown up and massacred in an ambush. Beneath the 'Arab's' headdress was the fair hair of the most dangerous man in the Middle East, Lawrence of Arabia, the man on whose head the Turks had placed a huge bounty. An electric detonator for an explosive charge had given Lawrence and his men trouble, but it was quickly fixed once the Turks were out of sight. The next troop transport train would not be so lucky.

Few people today know who Lawrence of Arabia was, but for a period after World War I, when

stories of his exploits began to emerge, he was one of the world's biggest celebrities. Although guerrilla warfare was by no means a new phenomenon, Lawrence stood out as a pioneer and inspiration for modern irregular warfare. His relevance is even greater than most people realise, as his tactics during the Great Arab Revolt of 1916-18 paved the way for today's Arab terrorist groups. Numerous freedom movements around the world have been wittingly or unwittingly influenced by Lawrence's example.

**THOMAS EDWARD LAWRENCE** was born in 1888 in north-west Wales, and after moving around a lot in his early years, the family ended up in Oxford, where he spent most of his childhood. After studying history at Jesus College, Oxford, Lawrence worked as an archaeologist in the Middle East in the years before World War I, with the likes of pioneering archaeologist Leonard Wooley. During this period of his life, Lawrence travelled extensively in the Middle East and learned to speak Arabic fluently. It was apparently also during this time that he became a keen advocate of Arab aspirations for independence.

As the clouds of war gathered in 1914, he returned home to Britain, and a few months after the outbreak of war, Lawrence's linguistic and geographical knowledge of the region saw him dispatched to ►



British officer  
T E Lawrence (1888-1935)  
played an important role  
in World War I as one of  
the leaders of the  
Arab revolt against  
the Ottoman Empire.





# LAWRENCE OF ARABIA

► Cairo as an intelligence officer. In this capacity, he would keep an eye on the Turkish Ottoman Empire, which had ruled the Arab areas of the Middle East for 400 years. The Turks had entered the war on the side of the Germans, and early Allied war efforts against the Turks at Gallipoli had been anything but glorious.

Dissatisfied with Turkish oppression, Sharif Hussein bin-Ali, the aged Emir of Mecca, launched a rebellion against the Turks in the Arabian Peninsula in June 1916. At the same time, the emir made an alliance with Britain and France, having been promised a large Arabian empire if he helped defeat the Central Powers. After a series of initial successes, such as the capture of the coastal cities of Rabegh, Yenbo and Jidda, the Arab rebel forces suffered heavy losses by superior Turkish troops when they attempted to storm Islam's second holiest city, Medina, in October that year.

**BOTH THE BRITISH** and the French quickly realised that the Arab uprising presented a huge opportunity for their war efforts and sent money, military advisers and some direct military assistance to the emir. Around the time of the debacle at Medina, Captain Lawrence arrived at

## “THE BRITISH AND THE FRENCH QUICKLY REALISED THAT THE ARAB UPRISING PRESENTED A HUGE OPPORTUNITY”

**To offset the Arabs' weakness through a lack of materiel and modern weapons, Lawrence developed a strategy based on fast raids from horse or camelback.**

the desert camp of the emir's son Feisal to assess the situation from the British point of view.

For Lawrence, this mission was a godsend, as life in Cairo was too comfortable and uneventful for his restless nature. At last, he felt he was in his element, and a mutual respect developed very quickly between him and Feisal, who, in the place of his aged father the emir, became the uprising's de facto leader. In his memoir *The Seven Pillars of Wisdom*, Lawrence gave a dramatic account of their first meeting.

*I felt at first glance that this was the man I had come to Arabia to seek – the leader who would bring the Arab Revolt to full glory. Feisal looked very tall and pillar-like, very slender, in his long white silk robes* ►







## Lawrence's air force

★ In his memoirs, Lawrence tried to give the impression that his war was fought almost entirely by camel-borne warriors, but this is only part of the truth. In addition to motorised vehicles, Lawrence also had his own air force, although he kept this a secret in his books.

The Royal Flying Corps assigned him a handful of planes operating from Aqaba. No 14 Squadron

not only carried out reconnaissance, but also attacked Turkish airfields and ground forces. Occasionally the planes were used to fly Lawrence to meetings with various Arab leaders, including Feisal himself.

All this is described in a book by James Patrick Hynes (a relative of one of Lawrence's pilots), entitled *Lawrence of Arabia's Secret Air Force*.

**The Middle East at the outbreak of war. When the Ottoman Empire was divided in 1920, Palestine, Jordan and Iraq came under British rule, while Syria and Lebanon came under French rule.**





# LAWRENCE OF ARABIA

► and his brown headcloth bound with a brilliant scarlet and gold cord. His eyelids were dropped; and his black beard and colourless face were like a mask against the strange, still watchfulness of his body. His hands were crossed in front of him on his dagger.

*I greeted him. He made way for me into the room, and sat down on his carpet near the door. As my eyes grew accustomed to the shade, they saw that the little room held many silent figures, looking at me or at Feisal steadily. He remained staring down at his hands, which were twisting slowly about his dagger. At last he inquired softly how I had found the journey. I spoke of the heat, and he asked how long from Rabegh, commenting that I had ridden fast for the season.*

*"And do you like our place here in Wadi Saфра?"*

*"Well; but it is far from Damascus."*

*The word had fallen like a sword in their midst. There was a quiver. Then everybody present*

**Lawrence examines the remains of an attack on a Turkish train along the important Hijaz railway in 1918. This type of raid facilitated the British Army's more regular war against the Turks.**

*stiffened where he sat, and held his breath for a silent minute. Some, perhaps, were dreaming of far-off success: others may have thought it a reflection on their late defeat. Feisal at length lifted his eyes, smiling at me, and said, "Praise be to God, there are Turks nearer us than that." We all smiled with him; and I rose and excused myself for the moment.*

Lawrence's mention of Damascus had sent something like an electric shock through the assembled group. Damascus was the dream destination of Arab nationalists, the intended capital of the united Arab nation.

**WHETHER THIS WAS** exactly what happened when Lawrence and Feisal, who would become a leading figure in the Arab uprising, first met is uncertain, given Lawrence's penchant for





exaggeration and dramatising his experiences. But one thing is certain: as an Arab friend and admirer of Arab culture, Lawrence was all-too aware of Arab nationalist aspirations and how these could be exploited to aid the British war effort. But he also had his own agenda: Lawrence had a sincere desire to unite the hopelessly divided Arab tribes and ensure that a unified Arab army could march into Damascus and declare a nation of its own.

Very quickly the young Englishman began to make himself useful and soon became a key figure in the revolt as Feisal's adviser and leader of many commando-style raids, which would give his work in the desert a romantic flavour for posterity. In December 1916, he also greatly impressed the Arab warriors when Lawrence enlisted the help of British warships to repel a Turkish attack on the coastal town of Yenbo.

Lawrence persuaded the main Arab leaders, headed by Feisal, to coordinate their operations for maximum effect. He also persuaded them to avoid attacking the strong Turkish force holding Medina and threatening Mecca, as the Arab insurgents were poorly organised and too weak to face the enemy in conventional combat. An attempted assault against a numerically superior, well-equipped and entrenched opponent would have resulted in heavy Arab losses

among fighters and civilians. Instead, Lawrence drew on what he knew of traditional Arab warfare with ambushes and rapid raids against caravans and other tribes. As quickly as they had struck, the raiders would vanish back into the inhospitable desert. He combined these insights with what he had read in history books about the wars of the Crusaders and the ancient peoples, from which he created something of his own.

**WITH ALMOST NO** personal military experience to draw on, Lawrence there and then developed a guerrilla tactic and strategy that better suited the Arab fighters' circumstances. He reasoned that a much stronger enemy could be weakened and unbalanced by incessant and palpable pinpricks, and launched a wave of assaults on small Ottoman military posts accompanied by bomb attacks on the Hijaz railway line between Damascus and Medina, which was vital to the Turks. The camel-borne Arab groups were much more mobile than their conventionally fighting Turkish opponents, who never knew where an attack might come from.

These actions succeeded, weakening and demoralising the Ottoman army, which soon put a ►

AWM



**The original flag from the 1917 revolution.**





# LAWRENCE OF ARABIA

► price on Lawrence's head. Large numbers of Turkish troops were tied up protecting the railway line and couldn't therefore be deployed to stop a British offensive from the Suez Canal into Palestine led by General Allenby. The constant disruption also meant that the strong Ottoman forces at Medina were forced on to a starvation diet and were down for the count in every respect.

**IN JANUARY 1917**, on Lawrence's advice, Feisal began to advance north along the Red Sea coast and captured the coastal town of Wejh after 36 hours of fighting, prompting the Turks to abandon the offensive against Mecca and switch to a defensive posture. The next important objective was Aqaba, which was the only remaining Turkish port on the Red Sea (thus making it a potential flanking threat to Allenby's forces, who were then preparing to move into Palestine). Moreover, the capture of Aqaba would facilitate the transport of arms, food and other supplies to the Arab uprising. A sea landing was out of the question because of the strength of the Turkish defences, but Lawrence knew there was a major weakness. All the fortifications at Aqaba faced the sea, because no one expected an attack from the land side.

Accompanied by an Arab leader named Auda Abu Tayeh (who had recently defected from the Turks to serve under Feisal) and only 40 camel-borne warriors, Lawrence left Wejh on 9th May 1917 and undertook an extremely arduous march

through vast stretches of unexplored desert before reaching inhabited areas, where they were able to recruit more warriors for the operation.

The capture of Aqaba in July of that year was a major success and confirmation that the war was turning against the Turks. Soon the harbour was overflowing with dockworkers unloading a steady stream of supplies for the rebel forces. After the capture of Aqaba, the British commander in Egypt, General Allenby, recognised Lawrence's usefulness, as his planned campaign north through

Palestine might need protection from flanking attacks from the desert. Through the support of both Allenby and Feisal, Lawrence therefore became a hugely influential man for the rest of the war.

Later in the autumn, Lawrence conducted a major raid deep into Turkish territory to blow up a key bridge on the Hijaz railway, in support of General Allenby's winter offensive against the Turkish defence line between Gaza and Beersheva. However, the force was discovered and the operation failed. But Allenby was successful with his operation and managed to capture Jerusalem just before Christmas 1917.

**THE DESERT WAS** a harsh environment, and the war was not very gentlemanly. The two sides rarely showed any mercy to each other and although Lawrence was very keen to avoid his own losses as far as possible, there was little room for compassion and kindness. Badly wounded comrades whom the Arab warriors could not take with them were killed to avoid inevitable torture by the Turks. Wounded enemies were methodically murdered or left to die in the relentless desert sun. Enemy soldiers who surrendered were far from always spared by Lawrence's men and he tolerated this behaviour.

When other British officers called him to account, Lawrence simply dismissed it by saying that the Arabs had a right to take revenge on their oppressors. In his memoirs, he describes how on one occasion he himself explicitly ordered that no prisoners be taken in an attack on a large Turkish force that had massacred the inhabitants of an Arab village.

Leading an irregular military force in the Middle East tested Lawrence's leadership, as the tribes were riven by division and their fighters were generally highly undisciplined. When they had finished looting, many simply headed home rather than continue the war. However, Lawrence proved a natural – not only as a military leader, but also as a politician and diplomat, resolving conflicts and motivating the reluctant to continue fighting.

**MEANWHILE, LAWRENCE REALISED** that there was a secret agreement between colonial powers Britain and France to divide most of the Arab territories between them. This was the so-called Sykes-Picot Agreement of January 1916, according to which present-day Syria and Lebanon would belong to France, while what now constitutes Iraq, Jordan and Israel was to be administered by the British. There was no room for a separate Arab nation and the promise to the Arab leaders would be broken as soon as the war was over.

The Arabs saw this as a huge betrayal by the Western powers, which has had repercussions in the Middle East to this day. Knowledge of this secret

Two Arab warriors in 1917.







**Emir Feisal bin Hussein (front) with his delegation on the steps of Versailles during the Paris Peace Conference in 1919. Lawrence is third from the right. Coloured photo.**

plan tested Lawrence's conscience and loyalties sorely, but only increased his determination to allow the Arab army to reach Damascus first and declare a state, thus presenting the governments in Paris and London with a *fait accompli*.

**ON 1ST OCTOBER** 1918, the Arab irregular forces under Feisal and Lawrence finally marched into Damascus. General Allenby had ordered his forces, who were also in the vicinity of the city, to allow the Arabs to liberate Damascus first, but an Australian division had nevertheless accidentally 'liberated' the city just before the Arab entry when it took a shortcut in pursuit of the retreating Turks. However, Lawrence kept quiet about this incident in his memoirs.

Almost immediately after the armistice, Lawrence, then physically and mentally exhausted, asked, to everyone's surprise, to leave the Middle East and return to England. Presumably, his bad faith towards the Arabs played a part in this decision.

In newly liberated Damascus, Lawrence had already played an important role in establishing a provisional Arab government under Feisal. However, his rule came to an abrupt end in 1920 when he was defeated by French forces who

## "THE TWO SIDES RARELY SHOWED ANY MERCY TO EACH OTHER"

took over Syria as a result of the earlier Anglo-French settlement. Thus, Lawrence's dream of an independent Arabia was shattered.

For a short period after the war, Lawrence worked for the British Foreign Office and as an adviser to the then-Colonial Secretary Winston Churchill. He subsequently turned his back on all this and spent the last years of his life working as a private soldier in the Royal Air Force under an assumed name. In 1935, however, he died in a motorbike accident shortly after leaving the RAF.

Lawrence's legacy lives on in many ways. Numerous books, feature films and documentaries have chronicled his adventures, and his desert warfare is a textbook example of irregular warfare that continues to be studied in military academies around the world. ★

**Niclas Sennerteg** is a journalist and author.



## Kut al-Amara 1915–16

# Hubris destroyed British campaign

The offensive against Baghdad was stopped in the trenches at Kut al-Amara, where the British found themselves under siege. It was one of the Allies' worst defeats in WWI.

Text: **HUGO NORDLAND**

**T**he stench reached the dock long before the ship did – another boat ferrying the wounded, or whatever you termed them. For these unfortunate souls, the line between life and death was thin. Many would not survive the day.

For 13 long days, they had been lying in their own blood, which was soon mixed with urine and faeces. About 600 had been lucky enough to get on board the steamer, but at least as many again had been placed on barges that the ship pulled behind it, exposed to the hot desert sun. Broken bones had been helpfully splinted with scraps of wood and shovel handles. Open wounds were infested with flies and maggots. There was no sign of paramedics.

What the army commander in Basra, Sir John Nixon, had just witnessed would make any experienced officer's stomach turn. Perhaps even worse than the stench were the heartbreaking screams and wails of the recent arrivals from the ranks of the Empire's Army of India. Nixon left the dock and telegraphed his superior: "WOUNDED SATISFACTORILY DISPOSED OF MANY LIKELY TO RECOVER ... MEDICAL SERVICES UNDER CIRCUMSTANCES OF CONSIDERABLE DIFFICULTY WORKED SPLENDIDLY."

This was just one of many lies in a gruesome parade of egocentric scheming that in the months around the turn of 1915-16 gave rise to the disaster at Kut al-Amara, some 300 kilometres north-west of where Nixon was.

In autumn 1914, the Ottoman Empire joined the Central Powers, opening a new front in World War I. The British Empire saw its vital oil interests in Mesopotamia threatened. Initially, a small force



was sent to protect the Abadan oil refinery, which supplied the Royal Navy with vital fuel. But the British military presence quickly intensified and soon an entire division was stationed in the area.

**THE NEWLY FORMED** expeditionary force, made up largely of soldiers from India, was led by Major General Charles Townshend, who in turn answered to the army's commander in Basra, General Sir John Nixon. Both gentlemen were of the careerist variety that was a common trait among the British officer corps of the time. Being put in charge of the empire's oil production in southern Mesopotamia in the middle of a world war was an operation far beneath their respective levels of ambition.

On their own initiative, they would expand their assignment to include an offensive against Baghdad, some 400 kilometres to the north-west. British ►

■ **The Ottoman Empire in 1915.**  
■ **Territory the Ottoman Empire lost to Great Britain prior to 1915.**



Contemporary illustration  
of the 2nd Dorset  
Regiment's assault on  
Turkish positions in Kut.





## KUT AL-AMARA 1915-16

► author Norman Dixon has made the following analogy: if the defence of Abadan was akin to having a bath, the campaign against Baghdad represented an attempt to swim the English Channel.

Nixon and Townshend's adventure in Mesopotamia started on a small scale. On 3rd June, on Nixon's orders, Townshend attacked and captured the town of al-Amara, around 160 kilometres north of Basra. The advance continued and less than two months later, an-Nasiriya fell. Victories came easily and further fuelled the officers' thirst for renown. Nixon then ordered Townshend to proceed to Kut, 140 km north, well on the way to Baghdad.

**JUST SOUTH OF** Kut came the first test of strength. A sizeable Ottoman force of just over 10,000 men and 13 obsolete guns awaited, under the command of experienced Turkish general Nureddin Pasha. Around 3,000 of his men, however, were untrained Arab recruits who preferred to fight for greater independence rather than the Ottoman Empire.

On the night of 28th September, British units crept towards the bend in the Tigris River where Nureddin

Pasha had ordered his forces to dig themselves in. But the British got lost in the darkness and the attack, which should have started at dawn, was delayed for several hours. Nevertheless, they began a methodical clearing of the trench systems with rifles and bayonets. However, Nureddin Pasha was sharp enough to realise when he was losing and ordered a retreat that saved most of his men. Around 2,000 Ottoman soldiers were killed, wounded or taken into British custody, along with the 13 guns.

Townshend had won the battle and thus control of Kut, but the victory had an unpleasant aftertaste. It irritated Townshend that so many Ottomans had escaped, while his own losses had been greater than expected. He had calculated that 600 men would be lost in the battle, but the result was double that. The precarious supply situation offered minimal opportunities to transport and care for the wounded. The only option was to load them on to barges and send them south along the Tigris.

**MEANWHILE, NIXON CONTINUED** to plan. The British government had by now got wind of



**Sir Charles Townshend was the commander of the British Indian Expeditionary Force sent to Baghdad.**

**British riverboat with a BL 6-inch naval gun on the Tigris River in 1916.**





how Nixon and Townshend had overstepped their authority. Such unauthorised initiatives were not good, of course, but at the same time, the British needed victories – the war was faltering on the Western Front as well as at Gallipoli – and the powers in Whitehall were happy to congratulate themselves on the victory at Kut.

Nixon was blindly optimistic, so much so that he failed to inform Townshend of reports that the Ottomans were expecting reinforcements of 30,000 men at the ancient ruined city of Ctesiphon, just south of Baghdad.

Time was against Townshend. The extended supply lines were now beginning to take their toll on the soldiers. Increasingly poor nutrition led to disease that incapacitated more and more men.

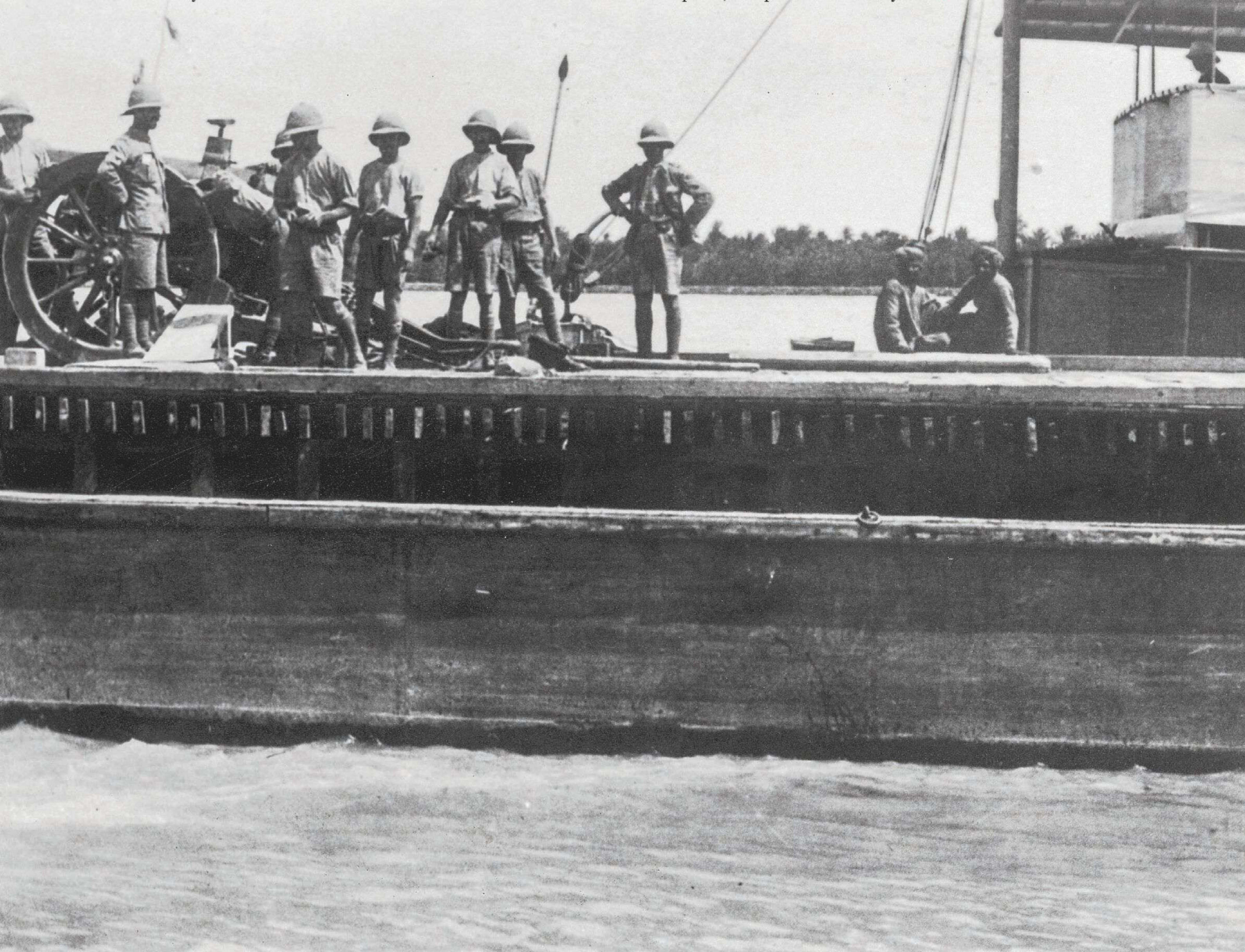
**ON 15TH NOVEMBER,** Townshend's Force D broke out of Kut. He travelled alone on the Tigris in the steamer *Méjidiéh*, while the men marched on shore along the river. Townshend's manservant, Boggis, ensured that the major general always had a whisky and soda on hand in case he wanted a

## “SOON, TOWNSHEND WAS STANDING NAKED AMONG THE PILES OF DEAD”

drink while reading or writing his diary. Late in the evening of 21st November, Ctesiphon was sighted on Townshend's right.

Scouts had reported that Nureddin Pasha had entrenched his soldiers in two lines at Ctesiphon. The plan was to have a small vanguard approach the first line under cover of darkness, engage them in a firefight and make as much noise as possible. At the same time, a larger detachment would move around an area of high sand dunes, which shielded them from the Ottomans' view, in an encircling manoeuvre before falling on the enemy's flank. At dawn on 22nd November, they went forward.

Although the vanguard's failure to engage the enemy before daybreak cost it the element of surprise, the plan worked beyond ►





## KUT AL-AMARA 1915–16

► expectations. Townshend's soldiers moved quickly into the trenches and inflicted heavy losses on the enemy. But clearing the trenches took a long time. For several hours, there was hand-to-hand combat, and the Ottomans fired back with uncanny precision. Many officers in particular fell victim to their bullets, and as the commanders disappeared, it became more difficult to direct the troops.

Townshend, who had followed his men into a trench, watched Nureddin Pasha's crumbling positions through his binoculars. The British commander was calm and composed in the heat of battle, and perhaps it was precisely his relaxation that he wanted to demonstrate when he suddenly asked Boggis to bring him a change of clothes.

"Now, sir?" his orderly replied.

"I always change at this time," Townshend reportedly replied in a cool manner.

**JUST LIKE THAT,** Boggis was forced to walk the kilometre or so back to the river – amid whistling bullets – to Townshend's wardrobe on the steamer. He returned with his heart in his mouth. Soon, Townshend was standing naked among the piles of dead, presenting his staff officers with an almost surreal sight. After pulling on his boots, trousers, shirt, silk vest and tropical helmet, and stuffing a piece of plum cake into his mouth, the major

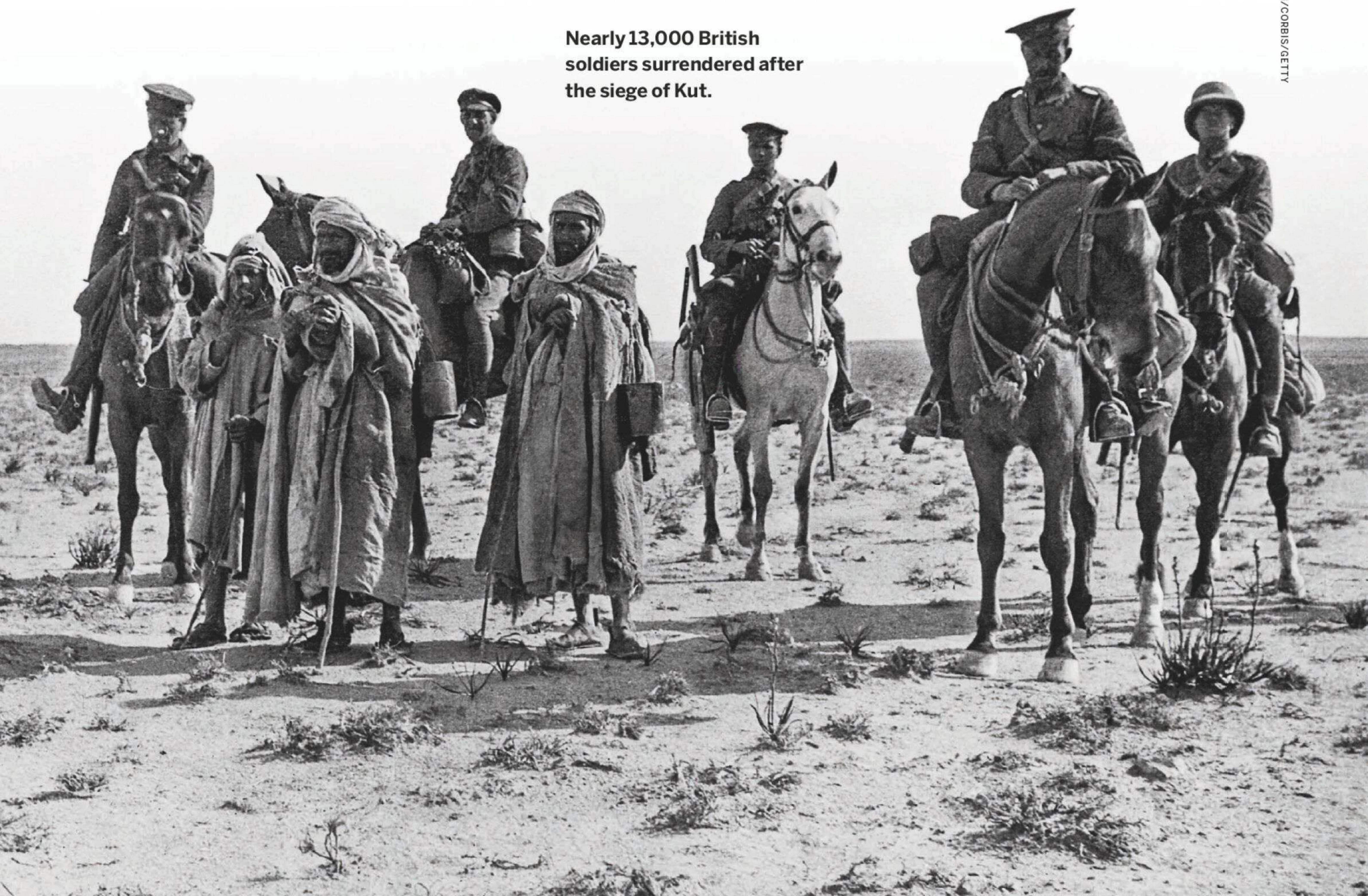
## "TOWNSHEND ... DELIBERATELY REDUCED THE SOLDIERS' RATIONS"

general returned to watching the battle through his binoculars.

It was at this stage that Townshend's luck turned. The Ottoman forces launched a counter-attack that hit the increasingly disorganised Force D with full force. Townshend was forced to quickly withdraw his troops to the first trench line. By now, several units were leaderless after the loss of their officers, and the soldiers had no idea where they were going. Not content with an orderly retreat, some left the battlefield in wild flight, with the jeers of their comrades in their ears.

**THE OTTOMANS LAUNCHED** new attacks in wave after wave, determined to capitalise on their new-found advantage. Townshend ordered artillery fire, and from their entrenched positions, the British were able to repel the Ottomans but only with great difficulty. However, the British troops inevitably ran out of ammunition and all they could do was pray that the Turks would tire

Nearly 13,000 British soldiers surrendered after the siege of Kut.





before they did. Their luck held and by nightfall on 24th November, the Ottomans withdrew. In three days of trench warfare, Townshend had lost around 4,000 men. There were men bleeding and crying out everywhere, and this was only the beginning.

In any case, the attack on Baghdad was no longer viable and Townshend now chose to move his forces back to Kut al-Amara. This was not a smart decision. Kut would still be far from the supply base in Basra and the town had no fortifications. Townshend had every opportunity to retreat further south to al-Amara, for example, where the line of defence would have been shorter for the British and longer for the Turks. Instead, he dubbed Kut “a strategic point we are bound to hold”, which has since been dismissed as nonsense.

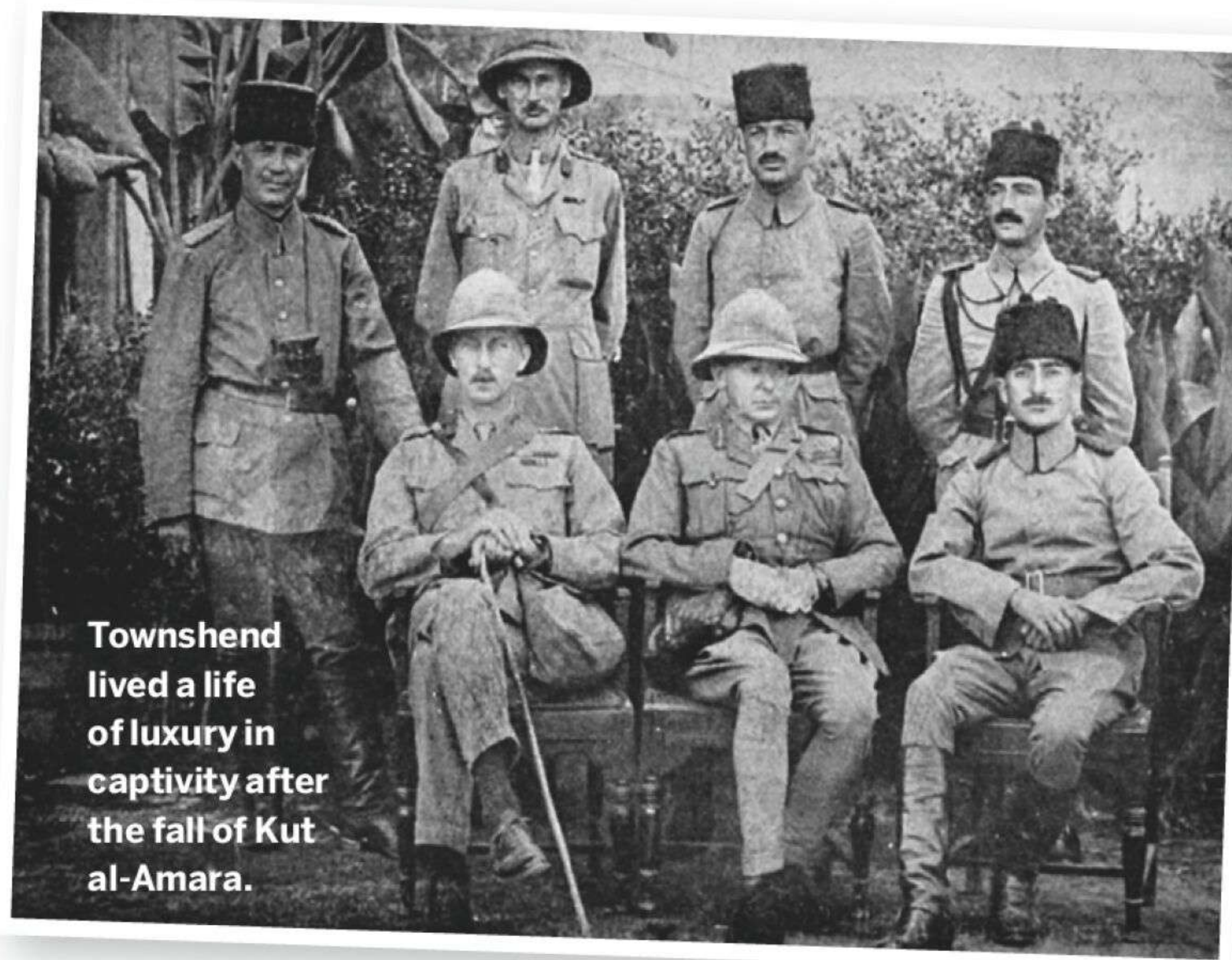
Although Townshend firmly claimed that his troops were exhausted and could not take another step south, he immediately put them to work digging ten kilometres of trenches, suggesting he was grossly exaggerating (at best). He continued to be economical with the truth, writing to Nixon that they only had enough food for a month. In fact, there were plenty of food reserves, but Townshend hid them away and deliberately reduced the soldiers’ rations to make it look like they were in urgent need of rescue. This would force Nixon to act.

**REINFORCEMENTS FROM INDIA** and Britain eventually arrived in Basra. Lieutenant General Sir Fenton John Aylmer was put in charge of the rescue army, which on 4th January 1916 was to embark on the march northwards. The force was a hotchpotch of various smaller units that had been available, but pressure from both Townshend and Nixon forced Aylmer to deploy his troops before they could be reinforced.

Conditions were not ideal, and Townshend refused to cooperate. In Kut there were about 11,000 men in all. By telegraph, Aylmer tried to get Townshend to coordinate a sortie from the town with the arrival of the rescue troops. Townshend refused on the curious grounds that any sortie would have to be followed by a retreat back to Kut, which the men would regard as a failure, and so morale would suffer.

As early as 6th January, the rescue force encountered Ottoman troops blocking the road at Sheikh Sa’ad. The Ottomans gradually withdrew, but engaged in several delaying actions that resulted in heavy losses for the rescue army. On 21st January, they were forced to turn back after losing 23,000 men, twice the number they were supposed to rescue.

Meanwhile, Townshend and his men sat waiting in Kut. To the increasing surprise of his superiors, Townshend kept revising the figure for the number



Townshend lived a life of luxury in captivity after the fall of Kut al-Amara.

of days his food supply would last. The initial projection of one month ended up being 147 days. However, that time could have been considerably longer and perhaps Townshend could have held out if he had instead chosen to entrench himself further south, closer to his home base in Basra.

**IN THE END,** Townshend fared relatively well after surrendering on 29th April 1916, when the food actually ran out. While he himself was welcomed as the personal guest of the Ottoman commander-in-chief, enjoying sumptuous dinners with exotic entertainment, his emaciated soldiers stumbled out of Kut under the threats and lashes of their captors. The survivors now faced a death march to Baghdad that fewer than a third of the British and just half of the Indian soldiers would survive. The British final bill for the futile Mesopotamian campaign would be 40,000 dead.

In 1920, Townshend published the book *My Campaign in Mesopotamia*. It failed to express the slightest remorse for any of the steps he took. On the contrary, Townshend argued that his defence of Kut saved the entire British foothold in Mesopotamia by tying up the Ottoman siege forces that would otherwise have rushed on to Basra. However, he admitted that, from a military history perspective, it was rarely wise for a commander to bury himself in a defensive position without ensuring that reinforcements were on the way. The position should also have been closer to home base so that the supply situation would have been easier to resolve. On this particular point, he was finally right. ★

**Hugo Nordland** is a historian and military history author. This article is an abridged version of his Swedish-language book *Militära Misstag (Military Mistakes: From Underestimating the Opponent to Overambitious Plans)*.



# ERWIN ROMMEL Desert Fox's

His great victories earned Rommel a reputation as one of World War II's foremost tacticians, but his refusal to address logistical problems ultimately led to the Afrika Korps' downfall. Picture from 1942.



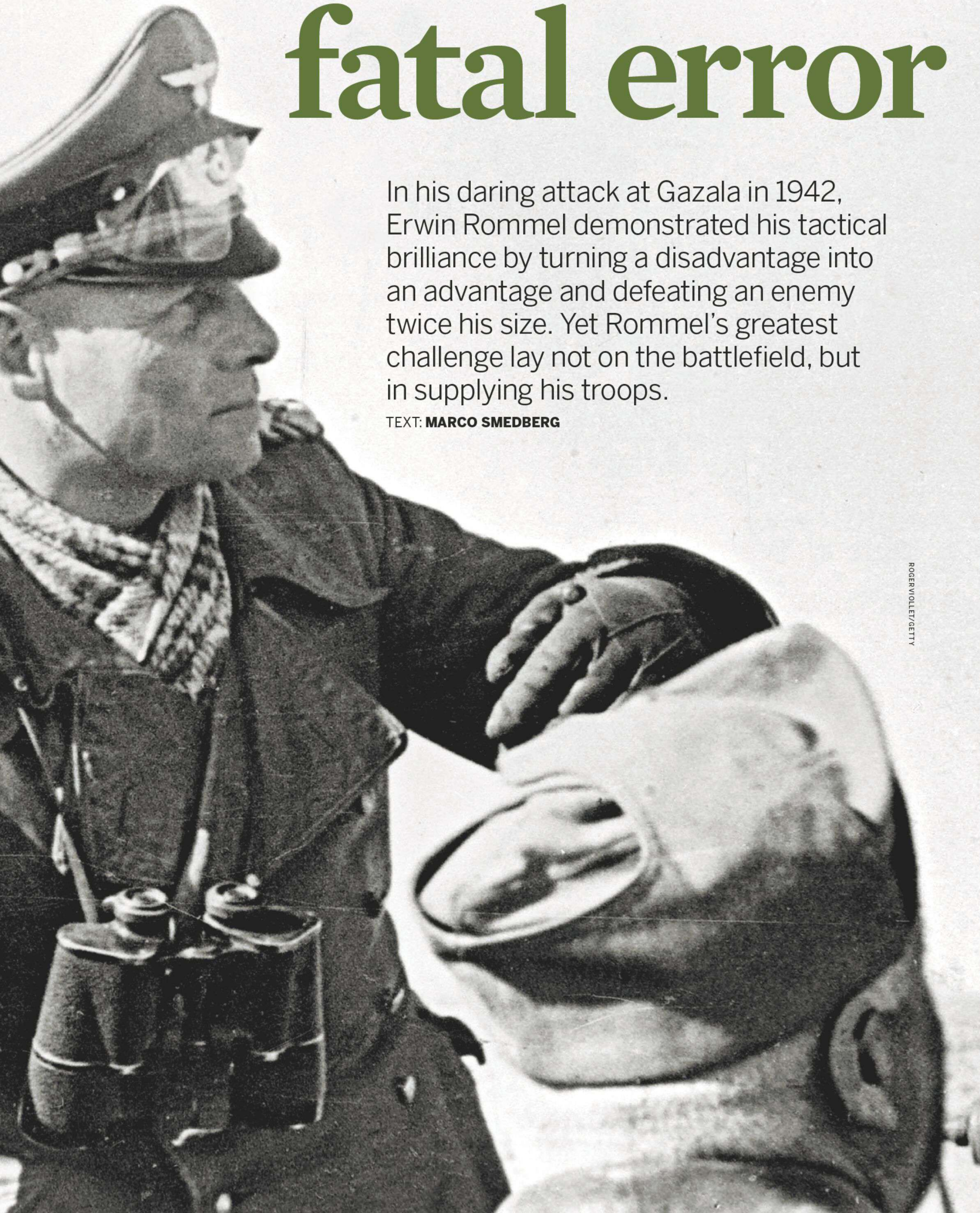


# fatal error

In his daring attack at Gazala in 1942, Erwin Rommel demonstrated his tactical brilliance by turning a disadvantage into an advantage and defeating an enemy twice his size. Yet Rommel's greatest challenge lay not on the battlefield, but in supplying his troops.

TEXT: **MARCO SMEDBERG**

ROGER VILLET/GETTY





## ERWIN ROMMEL

**B**y the afternoon of 27th May 1942, Lieutenant General Erwin Rommel's bold, night-time, flanking manoeuvre around the Allied defensive line at Gazala in North Africa looked like a colossal blunder. Thirty kilometres from the coast, the Afrika Korps' troops he was leading were forced to stop. Rommel, the Desert Fox, had fallen into a trap behind the British-led front and now the Germans risked being cut off. His two tank regiments had already suffered 30 per cent losses and they were running out of fuel and ammunition.

To make matters worse, the German tank crews had been unpleasantly surprised to discover that the British were reinforced with US M3 Grant tanks, which were far superior to their own Panzer IIIs.

At 16.00, 40 British tanks moved from the east, heading for the German staff and supply forces, situated to the south of the main battle line. Only a hasty regrouping of the force's armoured front and some fortuitously available 88-mm anti-aircraft guns saved the Germans from a major defeat.

The following day it was the British who blundered. Instead of using all their tanks to press home their attack against the German supply units, which could have brought an early victory, they switched their attack to less vulnerable targets and the opportunity was lost. Despite the precarious supply situation, Rommel brimmed with confidence.

Realising that his first plan was no longer viable, the Desert Fox ordered his forces to try to open a supply road through the British defensive line, but

**“Despite the precarious supply situation, Rommel brimmed with confidence”**

he soon found himself caught between two British brigades with Allied minefields behind him. His supplies now dangerously low, Rommel was forced to take up a defensive position – later termed the Cauldron – there on the Allied line. The general was unperturbed; he was a stubborn and brave soldier, and he was at his best when things seemed to be at their worst.

Taking advantage of a gap in the minefield that he had noticed earlier, the wily fox was able to lead a supply column through the Allied defences to help the stranded 15th Panzer Division. It was 29th May and he had just solved one of many crises during the battle at Gazala.

**THE ATTACK AGAINST** the Gazala Line, 50 kilometres west of Tobruk, began on the evening of 26th May under the cover of a sandstorm. While four Italian infantry divisions made a diversionary frontal attack, three German and two motorised Italian divisions swung around the British south flank. In the moonlit night, almost 10,000 trucks stole across the desert.

Rommel went with them. The Germans had 270 medium-heavy and 50 light tanks, while the Italians

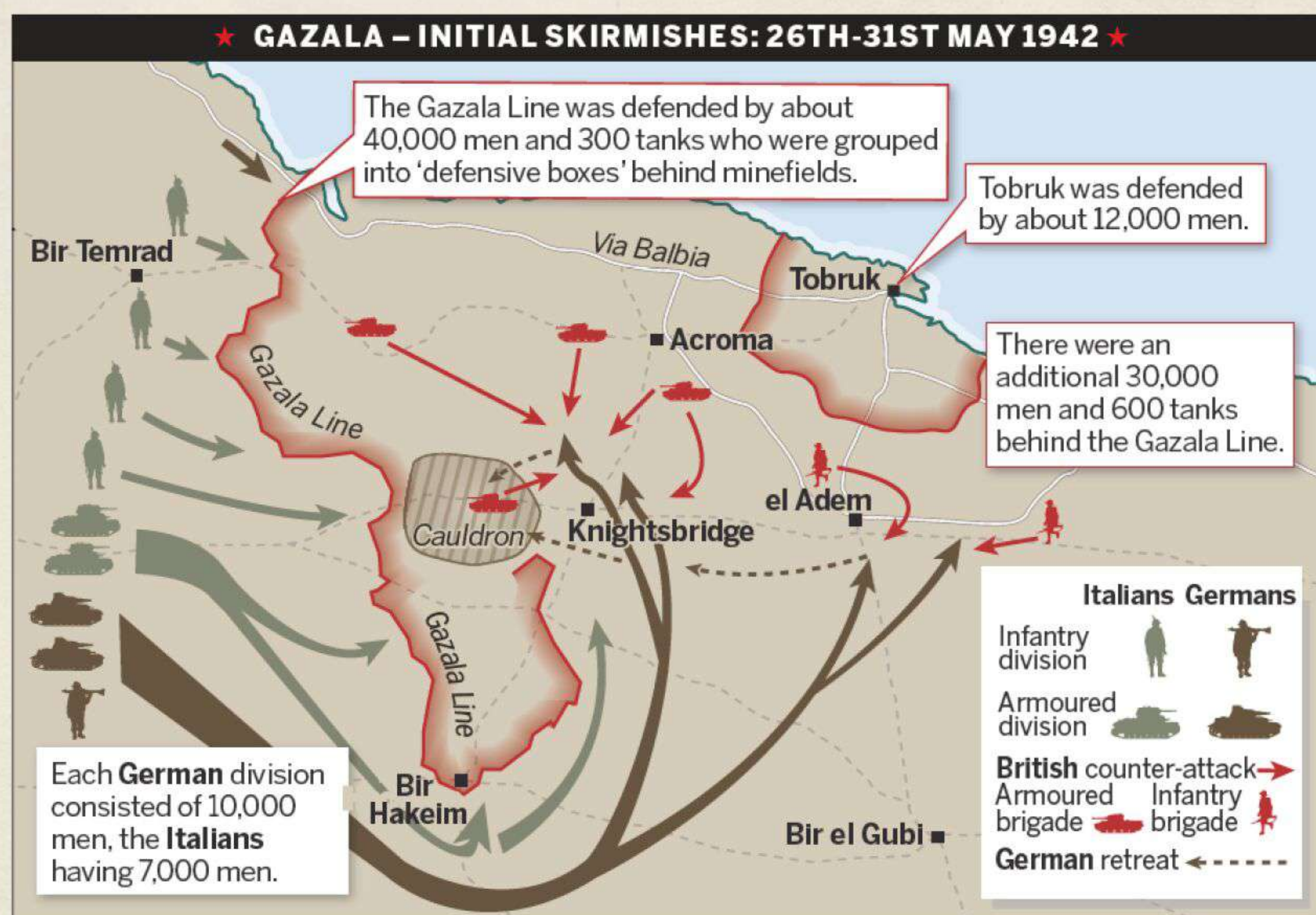


**The Afrika Korps emblem consisted of a palm tree and a swastika.**

## Rommel risked everything...

★ Rommel launched his offensive at Gazala on 26th May 1942 with a diversionary attack: four Italian divisions made a frontal assault to occupy as many Allied troops as possible. The main attack started later, under the cover of night, when five divisions circled around the British positions to the south. Their aim was to cut the coast road to Tobruk.

The Afrika Korps' advance stopped after a day, partly due to a lack of fuel and partly because Allied counter-attacks were threatening to cut them off. In the days that followed, the British repeatedly attacked the Afrika Korps, while the Axis forces attempted to open supply lines through the British Gazala Line.





had 240 light tanks. Even combined, the Axis forces were outnumbered by the British, who had over 900 tanks. After two days of fighting, though, that number was halved.

After Rommel rescued the 15th Panzer Division, the British thought they had him trapped. But their attacks on the Cauldron were hopelessly uncoordinated. The British numerical advantage was steadily reduced as its forces made one ill-fated assault after another against well-positioned anti-tank guns and tanks. In addition, the Germans were more adept at salvaging their damaged units, which helped level the playing field.

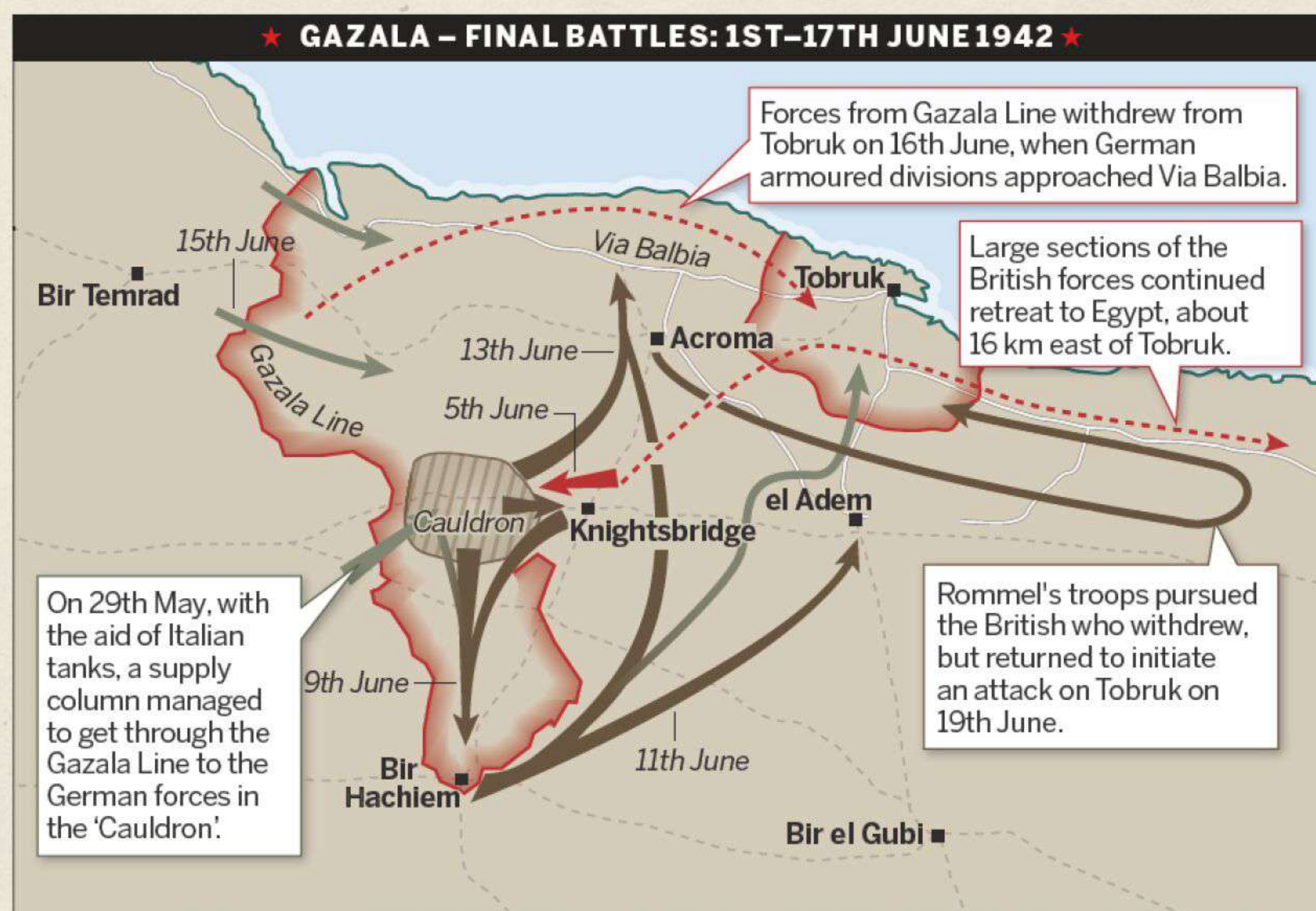
**THE BRITISH DEFENCES** at Gazala were arranged as a line of 'boxes': fortified and mined encampments that each housed a different unit. It was a strong defensive setup, but it meant that British units could not easily come to one another's aid. This weakness did not escape Rommel's attention and Axis forces were able to attack individual boxes piecemeal, open gaps in the line and instigate supply routes.

Rommel took advantage of every opportunity to hit his opponents on the counter-attack, preferably on their flanks where they were weaker. His mobility in battle kept his enemies guessing and it was a tactic that Rommel mastered better than any of his opponents. Unlike his British counterparts, Rommel led his forces from the front, shouting orders from his vehicle. This meant his men were able to engage in combat more quickly. British



Rommel (second on the left) led from the front and was able to issue orders quickly as the situation changed. Here he's seen in a Sd.Kfz. 250/3 outside Tobruk in the middle of June 1942.

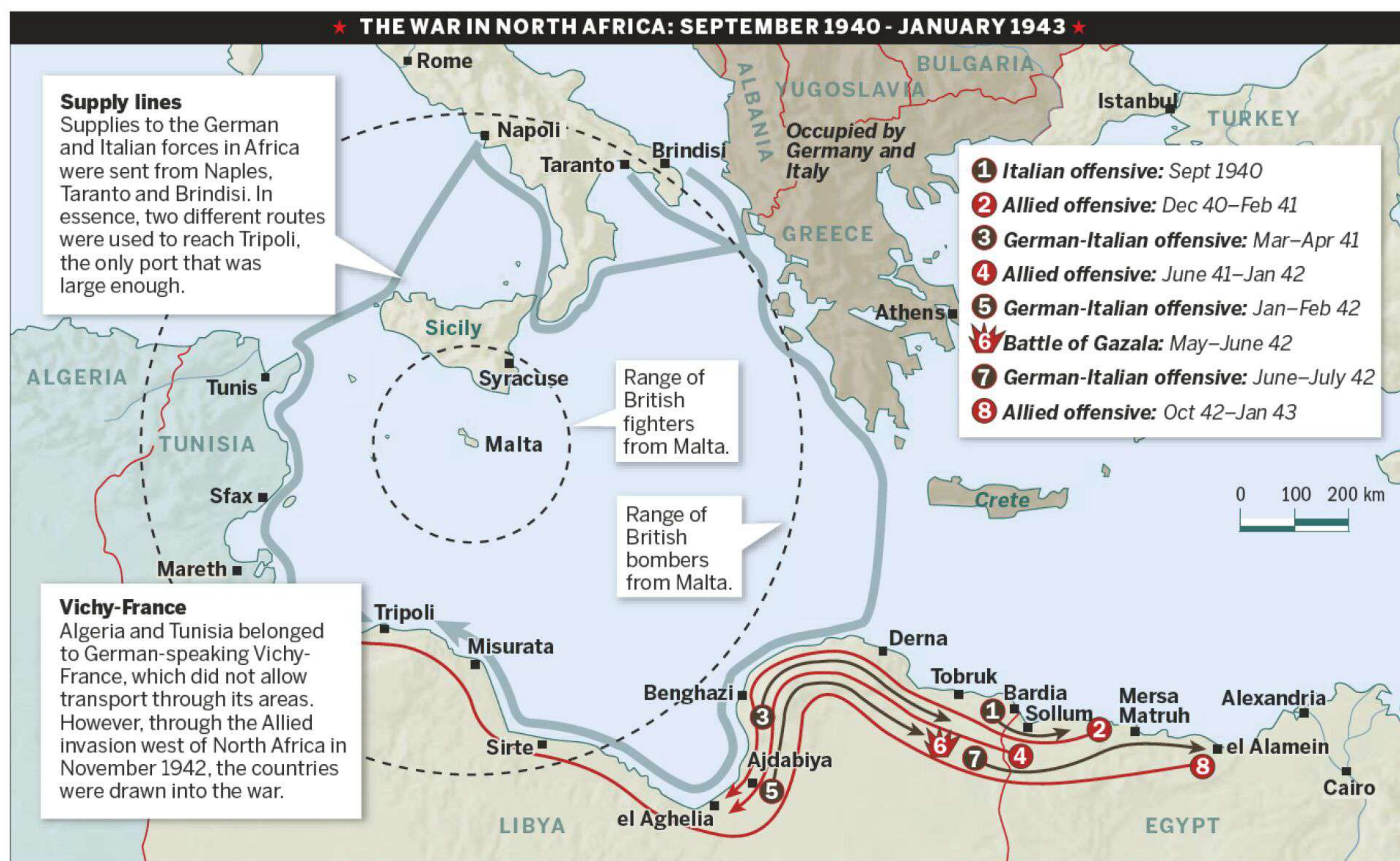
## ...and won the battle of Gazala



★ On 5th June, the British attacked the Germans again, but Rommel's forces had now received new supplies, and took the initiative with a counter-attack against the British Knightsbridge encampment. More provisions followed and on 9th June, Rommel sent two divisions against the Allies' most southerly stronghold, Bir Hacheim. The defenders resisted for two days before withdrawing. Having secured his supply lines and knowing that his left flank was protected by the Allies' minefield, Rommel shifted his attack to the north. The British forces began to fall back towards Tobruk on 14th June. The Germans and Italians pursued them briefly, but then returned to attack Tobruk on 17th June.



# ERWIN ROMMEL



British planes and subs based at Malta were a constant threat to the Axis supply shipments across the Mediterranean.

► generals, by comparison, lost valuable time interacting with one another behind the front line.

On 12th June, the three remaining British armoured brigades came under attack and suffered huge losses. The following evening, Rommel moved north. A brave South African anti-tank battery fought to its last gun to help its compatriots escape, but it wasn't enough to prevent the high ground it was defending, Rigel Ridge, from falling into Axis hands.

Now the Germans were in sight of Tobruk and able to threaten the coastal road, while the British forces still on the Gazala Line were in danger of being cut off.

The Allies began to retreat on 14th June. The Afrika Korps' advance north was hampered by minefields and fatigue. In fact, many of the German crews were so tired that they fell asleep as soon as the tanks stopped at nightfall. As a result, many of the Allied forces managed to escape, but the road to Tobruk and Egypt was now open.

**GAZALA WAS A** decisive German victory and a good example of the Desert Fox's offensive tactics. The British had long experience of desert war and had encountered no problems fighting the Italian forces. The Afrika Korps was altogether

**“He was in his element in fast-moving combat where he could exploit unfolding situations”**

more troublesome, even when the British had significantly greater numbers.

The biggest factor in the Germans' favour was their speed. The Allies simply couldn't keep up. British attacks were carefully planned and methodically conducted in a way that left little room for initiative in the field.

In addition, British brigades usually fought as separate units – a serious disadvantage against the Germans, who regularly massed their tanks for battle. In short, the British Army was not prepared for modern mobile warfare.

**IT ALSO HAD** an unusually formidable adversary in Rommel. An experienced leader, he was in his element in an arena of fast-moving combat, where he could swiftly exploit unfolding situations. He also had an unusual ability to predict his opponents' actions, an advantage he'd always tried to use to since World War I. Rommel also frequently chose to go on the offensive in battles,



Afrika Korps' uniform cap.



often using bold and surprising flank attacks to force his opponents to counter his moves.

Rommel's tactical genius brought him the admiration of his troops and the wider German public. Even the British respected him. The Italians were less enamoured, however, believing that he treated them with condescension.

Tactical brilliance is not everything in war – particularly in a desert campaign – and there were other factors that Rommel did not handle so well.

**BATTLE IN A** desert imposes great demands on the combatants' logistical frameworks: troops are unable to scavenge for even basic necessities, such as water – and are wholly dependent on provisions being shipped in from elsewhere. In this, the British had a great advantage because they could transport supplies around Africa, beyond the reach of the Luftwaffe, and through the Suez Canal to their main base in Alexandria.

The Axis Powers, on the other hand, were forced to ship supplies across the Mediterranean from southern Italy to Tripoli in Libya, their main port in North Africa. The Mediterranean transports were constantly threatened by the Royal Navy and the RAF, which were stationed at Malta.

Those supplies that made it across the Mediterranean still had a long journey to reach the troops. It's 1,000 kilometres from Tripoli to Benghazi – the same distance as Moscow is from the German border – and as the Axis forces advanced, the lines stretched ever further, Alexandria being a further 1,000 kilometres beyond Benghazi. There was nowhere along the rest of the coast – including the harbour at Tobruk – that was suitable for landing supplies and there was no railway that could convey provisions. All the supplies, including fuel, ammunition and water, had to be driven by lorries along the coast road.

To make matters worse for the Germans, their transports were vulnerable to air attack during the day and their vehicles suffered in the desert climate, almost halving their lifespans.

The Italians had around 7,000 trucks, while Afrika Korps had 3,000 – ten times more than those possessed by German forces at the start of their attack on the Soviet Union. But it still wasn't enough. Rommel's armoured divisions each consumed about 100 tonnes of supplies every day, and a further 100 tonnes in battle. Add to that figure provisions for German reserve units and five Italian divisions,

and they were left with a transport requirement of around 50,000 tonnes per month.

This figure was manageable providing that they didn't go on the offensive. Capturing new territory meant extending the supply lines, which increased the wear and tear on the trucks. Sadly, for the Axis quartermasters, Rommel wasn't one to stay put and he stretched the lines to the point that an additional 12,500 trucks were required to supply the German-Italian offensive, 25 per cent more than they had. Rommel's solution was to ignore the problem.

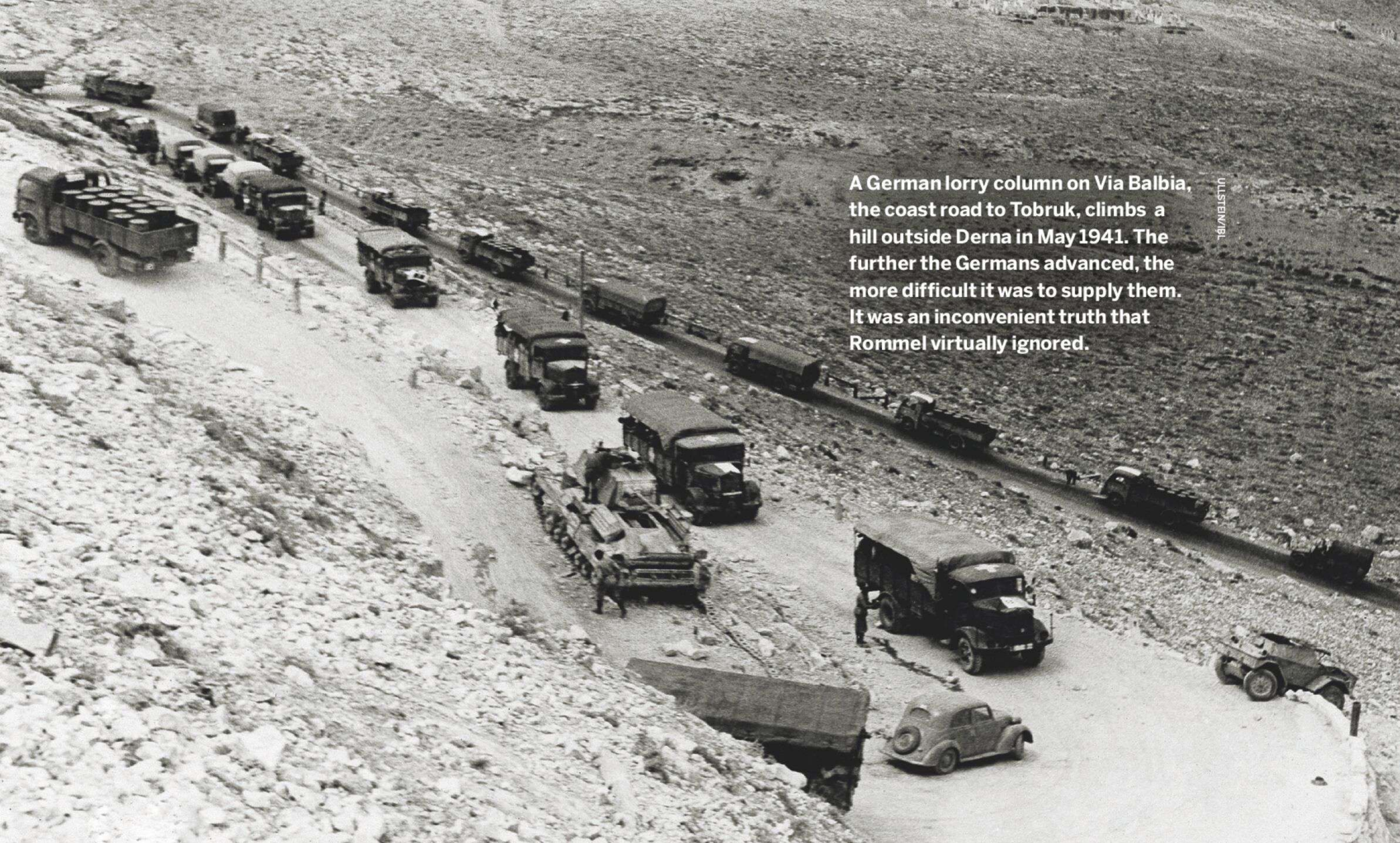
**AT THE END** of 1940, British and Commonwealth forces launched Operation Compass, the first major action of the Western Desert Campaign. Within two months, the Allies had eliminated Italy's 10th Army and captured Egypt. Fearing that Mussolini would lose all of Italy's North African territories, Hitler sent the newly formed Afrika Korps in early February 1941. Initially, only the 5th Light Division disembarked in Libya and Rommel had to wait until May for the 15th Panzer Division to arrive.

The German General Staff had previously stated that four armoured divisions were needed to defeat the British. However, to field that many units, the Italian forces would need to be withdrawn because otherwise they would consume the supplies required by the new German divisions. Mussolini would have balked at such a solution, though, so ►

**Rommel sits on the tank's turret in the open desert terrain. The picture shows a German Panzer III Ausf. G. The crew has improvised additional armour by hanging spare tracks and wheels across the front of the hull.**







A German lorry column on Via Balbia, the coast road to Tobruk, climbs a hill outside Derna in May 1941. The further the Germans advanced, the more difficult it was to supply them. It was an inconvenient truth that Rommel virtually ignored.

UJLSTBNVBL

- ▶ the plan was put on ice. Instead, Germany sent the relatively weak Afrika Korps, expecting it to be used for defence. Rommel chose to attack instead.

He launched his first offensive on 24th March 1941 with the 5th Light Division supported by two Italian Divisions. The British, who had been weakened when they sent reinforcements to Greece, retreated. Despite the paucity of his resources, Rommel decided to try to capture the entire eastern coastal region of Libya. The head of the 5th Light Division, Lieutenant General Johannes Streich, claimed that their vehicles needed to be adapted before they could advance further. Rommel refused to listen, later commenting that “one cannot permit unique opportunities to slip by for the sake of such trifles”.

Rommel’s forces quickly captured Benghazi and, ignoring headquarters’ warnings against making further advances, he laid siege to Tobruk on 11th April. Three days later he was at the Egyptian border.

The port city of Tobruk was at the centre of the North Africa theatre of war. The city was defended by 25,000 men from British and Commonwealth forces and could be reinforced from the sea. Impatient for success, Rommel threw a series of small-scale attacks at the stronghold. The result was failure and an unnecessary loss of life.

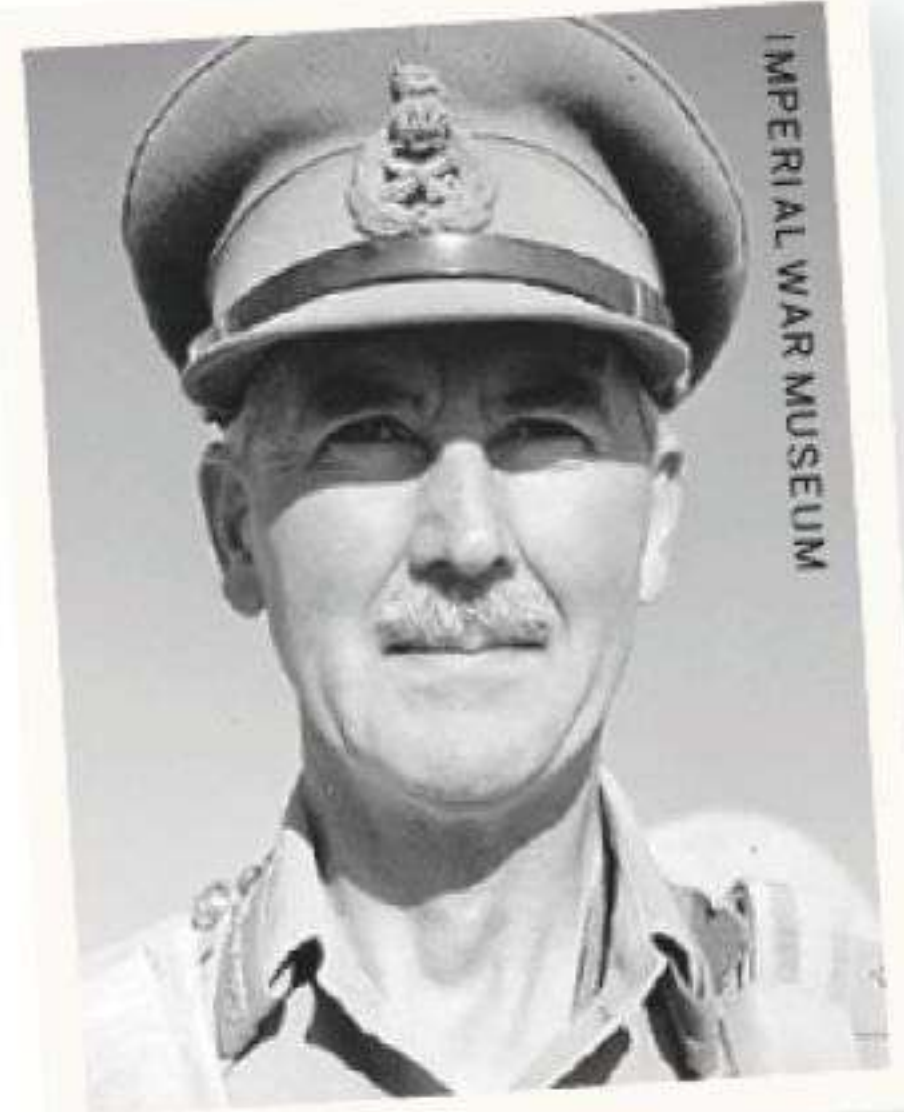
But Rommel now had other problems, too. His unsanctioned advance had put a critical strain on the supply lines. Even if enough provisions could be shipped to Africa to satisfy the Afrika Korps’

requirements, Rommel’s force had now reached such a distance from Tripoli that it was at the limit of the logistical supply route. To make matters worse, the Italians attempted to prioritise supplies for their own forces, which aggravated the strained relations between the Germans and Italians.

When Rommel asked for reinforcements, headquarters replied that all available resources were required for the forthcoming attack on the Soviet Union and that it was, in any case, impossible to effectively provision more German forces in North Africa. Disappointed, Rommel ordered a new attack on Tobruk on 4th May. Once again, the attack failed. Two major counter-attacks by the British – Operation Brevity in May and Operation Battleaxe in June – attempted to break the siege, but the Axis forces held firm and the front stabilised.

**IN AUGUST 1941**, the Axis commanders changed the organisational structure in North Africa and Rommel became the head of Panzergruppe Afrika. This consisted of the Afrika Korps, which now included the 15th and 21st Panzer Divisions (the latter being a reorganised version of the 5th Light Division that had been upgraded to a fully fledged armoured division), the newly arrived German 90th Light Division, plus six Italian divisions: four infantry, one motorised and one tank division.

The British also strengthened their forces, which now comprised two army corps from the newly formed Eighth Army under the command



**Alan Cunningham** was briefly commander of the British Eighth Army.

IMPERIAL WAR MUSEUM



of General Alan Cunningham. Thanks to better supply routes, the British were able to reinforce more rapidly than the Germans.

On 18th November, the Allies launched Operation Crusader, sending 770 tanks into an attack to relieve Tobruk's defenders. Rommel countered with just 414 tanks, but still won the battle.

Increasingly desperate, the British threw their tank brigades forward, but Rommel skilfully parried their attacks, using his numerically inferior forces in effective counter-attacks. Having lost around 500 tanks, the British were forced to call off their attack.

Rommel wanted to press his advantage, but he knew his force was too small to do any real damage unless the British retreated. Initially, they did just that. But Cunningham's superior, General Claude Auchinleck, countermanded the order and replaced Cunningham. With only 100 operational tanks that were being driven ever further from their supplies, increased British resistance and ever more effective air strikes against German forces and their supply columns, Rommel was forced to disengage.

**IN PRACTICE, THE** Afrika Korps was cut off. Even Rommel was forced to face the problem this time and ordered a retreat. The siege of Tobruk had been lifted. By 30th December, the Germans were back in El Agheila, where they had started in March. However, German supply lines were now less stretched, while the problems facing British quartermasters increased.

Rommel demanded reinforcements, including 8,000 lorries, but German army command refused. Its focus was on the campaign in the east, where four panzer armies shared a total of 14,000 lorries. Rommel was forced to make do with more modest reinforcements, including 55 new tanks that arrived at the beginning of January 1942. Undeterred, he planned a new offensive. On 21st

## “Rommel attacked the Gazala Line and turned what seemed to be a hopeless position into an advantageous point of attack”

January, he went on the attack with the renamed Panzerarmee Afrika.

In response, the British drew back to Gazala and Tobruk. Thanks to the Luftwaffe's efforts over Malta, more supplies were reaching Rommel's forces and both sides began preparing for a summer offensive.

On 26th May, Rommel attacked the Gazala Line and turned what seemed to be a hopeless position into an advantageous point of attack. After a busy week of hard fighting, the British began to retreat. Rommel chased them in the hope that he could capture Tobruk before they had the chance to organise a proper defence.

This time the Germans succeeded. As soon as they arrived at Tobruk, they conducted a powerful and well-coordinated attack. The city fell on 21st June. The Germans took 33,000 men captive and gained valuable supplies. It was Britain's biggest setback since losing Singapore in February. Rommel was rewarded with the rank of field marshal.

Rommel knew that the British were shaken. The Allies feared that a successful Rommel attacking through Egypt could threaten Britain's valuable oil resources in the Middle East or even join with German forces attempting to take the oil fields in the Caucasus. Rommel was keen to attack again before the Eighth Army was able to reorganise, but Tobruk's port wasn't big enough to allow him to extend his supply lines.

His choices were either to continue and attempt to conquer Alexandria or fall back to Tripoli. Staying ►

## Forced to take his own life

★ Erwin Rommel's reputation was founded during World War I, during which he was awarded Pour le Mérite, Germany's highest honour for courage in the field. After the war, Rommel documented his experiences in the book *Infanterie Greift An (Infantry Attacks)*, published in Germany in 1937.

During the campaign in Poland, Rommel led Hitler's personal guard before taking command of the 7th Panzer Division in France

in 1940. After Africa, he was appointed head of Army Group B in France. His task was to defend Normandy in June 1944.


Implicated in the plot to assassinate Hitler, Rommel chose to take his own life on 14th October 1944, thereby protecting his family from the repercussions of his being tried and executed for high treason. He was given a state funeral as part of a Nazi propaganda campaign.



Rommel's coffin being carried through Ulm, 1944.

BUNDESARCHIV, BILD183-J30704 CC-BY-SA 3.0



A large, olive-green half-track vehicle is suspended in the air by a crane on the deck of a ship. The vehicle has a car-like front with a windshield and a flat top, and a rear section with multiple sets of wheels and a continuous track. It is being lowered towards a sandy beach. In the foreground, several soldiers in khaki uniforms and caps are standing and watching the operation. The ship's dark hull and complex rigging of ropes and masts are visible in the background under a clear blue sky.

Troops could often be flown to North Africa, while all materiel had to be transported by sea. A major bottleneck for these transports was the small harbours. In the picture, a half-track vehicle is unloaded near Tripoli.



► put in Tobruk wouldn't achieve anything. Rommel chose to continue the offensive.

Meanwhile, Italian high command wanted to neutralise Malta's influence to secure the Mediterranean supply route and proposed that the Luftwaffe should support an Italian attack on the island. Field Marshal Albert Kesselring, head of German Luftwaffe forces in the Mediterranean, supported the idea and pleaded with Rommel to delay his offensive until the Italians had dealt with the threat from Malta, arguing that he could then direct all the Luftwaffe's limited resources to supporting the advance across the desert.

But Hitler said no to Malta, and supported Rommel, who, in turn, hoped that the supplies he had captured in Tobruk would be enough to get his men to Suez.

Rommel set off on 22nd June. Initially, his forces faced little resistance from the British, but that was about to change. General Auchinleck established a new Allied line of defence at El Alamein, between the sea and the cliffs edging the Qattara Depression, an area of impassable salt marshes.

**ON 1ST JULY**, Rommel reached the new British line and there he stayed for the next 26 days as the two forces exchanged hostilities. This was the First Battle of El Alamein and it ended in a stalemate.

The German supply lines were now stretched to breaking point and only small reinforcements were reaching the front. On the British side, General Bernard Law Montgomery had just assumed command of a well-provisioned Eighth Army. Rommel realised that he was at risk of losing.

On 30th August, he tried to attack the British from Alam el Halfa, south of El Alamein. The battleground lacked elbow room, however, so the attack was abandoned. The British organised a counter-attack. The ensuing battles ran for two days; the Germans lost 3,000 men, 50 tanks and as many guns. Worse, they also lost 400 trucks, which further weakened Rommel's supply line. This time the British losses were lower than the Germans'. Allied air strikes were changing British fortunes.

In September, an exhausted Rommel returned to Germany to recuperate. After a period spent regrouping and retraining his troops, Montgomery's Eighth Army launched a major offensive on 23rd October. In the Second Battle of El Alamein, the British took a week to break their opponent. Rommel, who returned just after the battle had begun, did all that he could to stop a British breakthrough, but with ever fewer tanks, dwindling supplies of fuel and ammunition, and without cover against RAF air strikes, the situation soon became untenable.

On 4th November, the British broke through and Rommel ordered a retreat. Only the fully motorised

## “The desert is often referred to as ‘a tactician’s paradise – but a quartermaster’s hell’”

forces got away. Most of the Italian infantry was captured. Rommel's remaining forces conducted an orderly withdrawal, occasionally fighting delaying actions to win time for slower units to catch up. The retreat finally halted in Tunisia, where the 10th Panzer Division had arrived to reinforce the country following the Allied invasion of French Vichy-held territories in Morocco, Oran and Algiers.

The invasion sparked the Axis occupation of Vichy France and the capture of the French fleet. It also enabled them to transport supplies from Toulon in France to Bizerta in Tunisia, strengthening their bridgehead into Tunisia in a way that Rommel could only have dreamed about. It was too late, though. The Allies' naval and air superiority meant that it was increasingly difficult for the Axis Powers to get supplies to Africa by any route. In March 1943, Rommel was replaced and left Africa. Two months later, the Axis forces surrendered in Tunisia.

**THE DESERT IS** often referred to as “a tactician's paradise – but a quartermaster's hell”. Rommel and his Afrika Korps seemed determined to prove this. Thanks to his bold offensive tactics, he won many battles, but ultimately it counted for little as the supply situation made it impossible for him to hold the territory he took.

Malta neutralised the Luftwaffe, but the lack of a decent port on the North Africa coast was a greater obstacle. When the Second Battle of El Alamein raged in October, much of Germany's resources remained stuck in Benghazi, 1,000 km away.

Rommel constantly complained that he did not get reinforcements, but he wouldn't have been able to supply them even if they'd been sent. A radical solution would have been to replace the Italian forces with an equivalent number of German divisions that had the tactical ability required to capture Egypt. This would have ensured there was no shortage of supplies, but the Germans could not afford to offend their allies with such a demand.

All in all, the original German plan to defend Italian-held North African territories with a limited force was the best solution. The defeat that followed was largely a result of Rommel's refusal to stick to the plan and his naïve strategy of capturing territories he wasn't equipped to hold. ★

**Marco Smedberg** is a military historian.



HISTORIE ARCHIVE

**Bernard Montgomery defeated Rommel at El Alamein. Read more about Montgomery on page 38.**

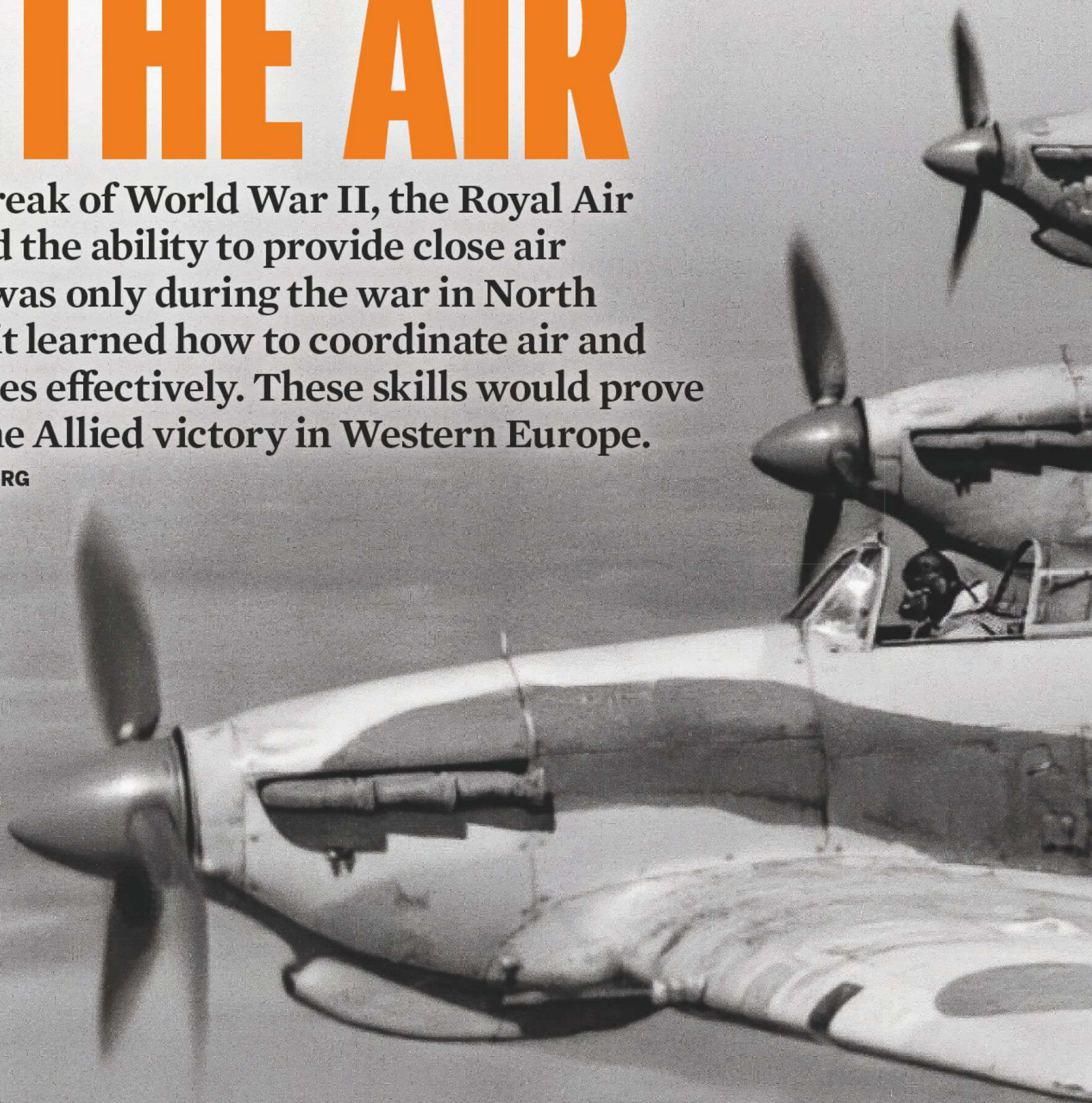


**North Africa 1941-43**

# **DESERT WAR IN THE AIR**

At the outbreak of World War II, the Royal Air Force lacked the ability to provide close air support. It was only during the war in North Africa that it learned how to coordinate air and ground forces effectively. These skills would prove crucial to the Allied victory in Western Europe.

Text: **MARCO SMEDBERG**







Five British Hawker Hurricane IIC aircraft from No 94 Squadron, stationed at El Gamil in Egypt. Photo from 1942.



# DESERT WAR IN THE AIR

It was a January day in 1943 when a German armoured reconnaissance battalion launched an assault against British forces in North Africa. The battalion commander, Major Hans von Luck, described how his force was suddenly attacked by British aircraft.

*Then they came: flying out of the sun and low over the ground, the Hurricanes attacked, protected by Spitfires, which kept watch high above them.*

*No special orders were needed: all movement ceased, every man left his vehicle and lay flat on the sand 30 yards away. My motorcycle escorts opened fire with their machine guns, but without success. We didn't know that the Hurricanes were armoured on the underside. Their target was the flak platoon [anti-aircraft platoon], which was eliminated before it could fire a shot.*

*On their second run up, the artillery platoon was hit and its vehicles badly damaged. As fast as they had come, the fighters turned away again. Everything had lasted only a few minutes.*

HISTORIE ARCHIVE



**Major Hans von Luck and his battalion experienced first-hand the effectiveness of air support from Hawker Hurricanes.**

**AFTER LESS THAN** an hour, the planes returned for another attack. This time the German armoured vehicles were attacked with rockets. Although most of the rockets missed, when they did find their mark, they easily penetrated the vehicles' armour.

It was attacks like this – where aircraft supported ground units – that helped the Allies win the Desert War in North Africa. But it wasn't until the final stages of World War II that all the ingredients needed for an effective attack aircraft had fallen into place.

Already during World War I, the British had a well-functioning idea for attacking units in the immediate area of battle – in other words, close air support. The

prerequisite was that they had already gained air supremacy and could therefore use fighters for ground attacks. These were equipped with small bombs and were known as fighter-bombers.

The missions were unpopular with the pilots – because they required flying at low altitude, the aircraft was exposed to small-calibre fire from the ground. On the other hand, the air support was much appreciated by ground units. In addition to purely practical benefits like destroying enemy men and materiel, it was good for the soldiers' morale to see their own aircraft in the air.

**DESPITE ITS ADVANTAGES,** the idea was forgotten within the RAF during the interwar period. Bomber Command prioritised attacking targets on the ground and Fighter Command focused on its main task, which was the struggle for air supremacy and its related fighter battles. The RAF felt that it didn't have the resources left to help the army with close air support. Consequently, fighter pilots weren't trained in attacking ground targets and the British began World War II without a working concept of close air support.

During the 1940 campaign in France, the British Army complained bitterly about the lack of air support. Often, units saw no other aircraft than German dive bombers – or fighters that attacked ground targets after the air battles were over.

On 10th June 1940, Italy joined the war. Now it became important for the British to protect the vital Suez Canal, which was threatened by two Italian armies: one in Libya and one further south in Eritrea. The Italian forces had access to three times as many aeroplanes as the British, and more could easily be transferred from Italy to North Africa if

## The different roles for attack aircraft

### Air interdiction (AI)

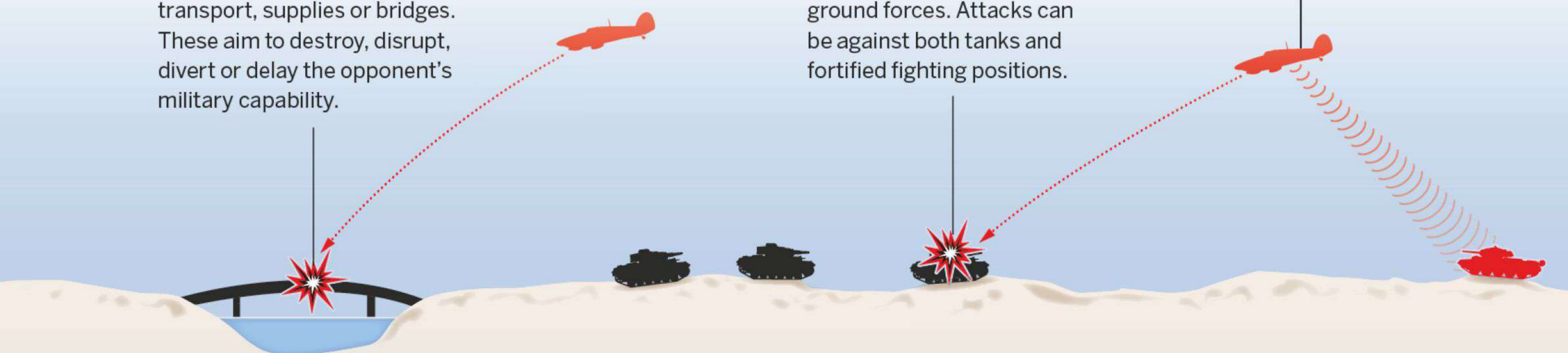
or deep air support (DAS) involves attacks on targets behind enemy lines, such as transport, supplies or bridges. These aim to destroy, disrupt, divert or delay the opponent's military capability.

### Close air support (CAS)

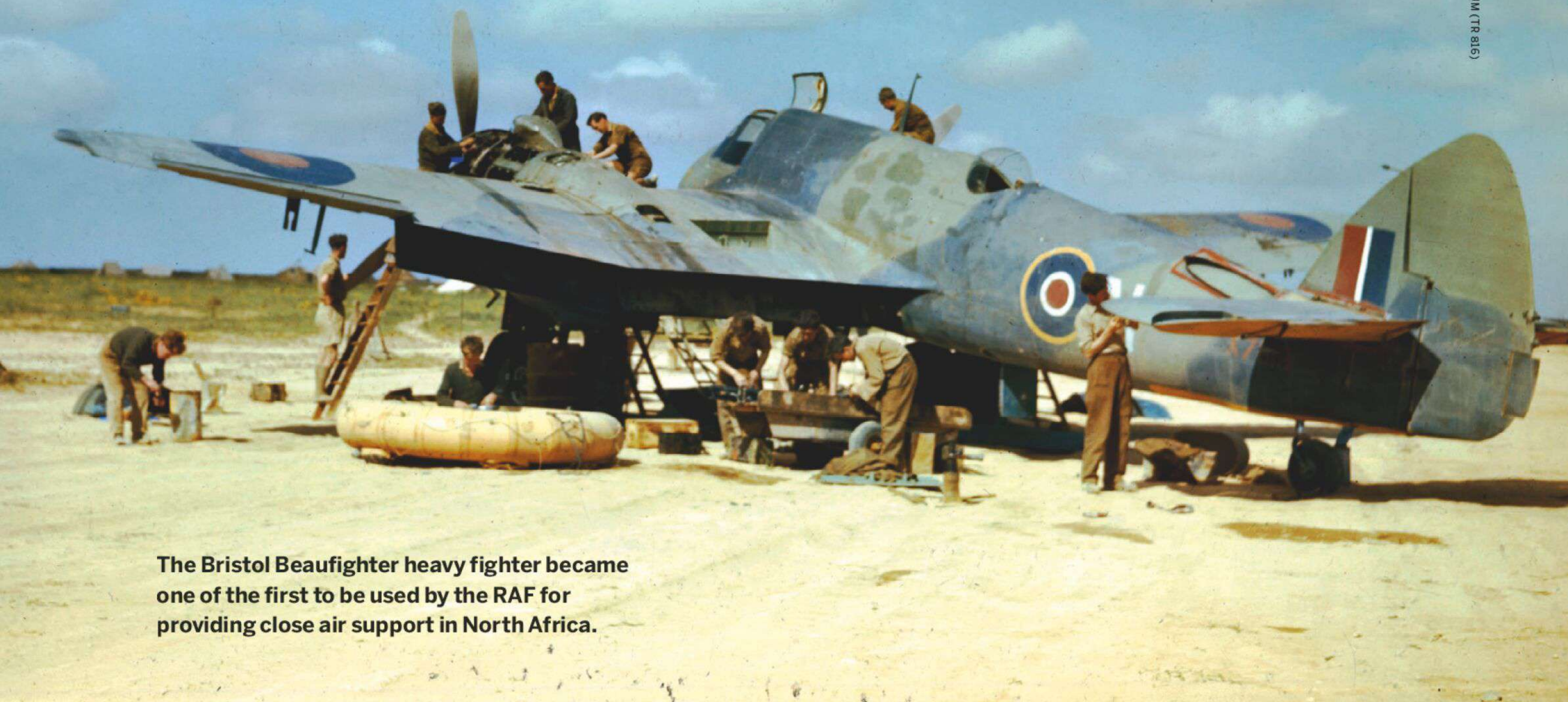
is an attack on targets in the immediate area of battle to support one's own ground forces. Attacks can be against both tanks and fortified fighting positions.

### Radio contact

between the ground units and the attack planes.







**The Bristol Beaufighter heavy fighter became one of the first to be used by the RAF for providing close air support in North Africa.**

required. Expecting an immediate offensive against Egypt from Italian Libya, the British dispatched one reconnaissance, one fighter and four bomber squadrons – a total of 81 aircraft – from Egypt to various bases in the desert. That the British had not mastered close air support was evident from the fact that it wasn't part of the air force's operations. Instead, its assignments included reconnaissance, anti-submarine warfare and attacks on harbours.

**THERE IS A** saying that desert warfare is “the tactician's paradise and the quartermaster's hell” (the quartermaster is responsible for the maintenance of supplies and materiel for the troops). While the open and clear terrain resembles the ocean, with no obstacles to operations, the climate and long distances pose major logistical challenges, including maintenance. The area of operations in North Africa was even larger than on the Eastern Front and it took a long time to bring in supplies and spare parts. Permanent airfields were scarce and during the rainy season, the temporary air bases were often flooded, rendering them unusable.

While the British forces, despite their shortcomings, were characterised by an attack-minded spirit and a willingness to improvise, the Italians appeared cautious and cumbersome. The difference in these attitudes is illustrated by the first battle that took place on 11th June. When British

## “Despite their new superior planes, the British were still too weak to gain air supremacy”

bombers attacked the Italians' main airbase, Italian aircrew lined up to listen as their unit commander read out the declaration of war.

It was only in September that the Italians launched an offensive against Egypt, which halted after 80 kilometres. Meanwhile, the British were reinforced with better fighters in the form of Hawker Hurricanes. But despite their new superior planes, the British were still too weak to gain air supremacy. Here, therefore, they did not even try to use their fighters to attack ground targets.

At the same time, however, they did so in battles to the south. Here, despite being outnumbered, the British managed to comprehensively defeat the Italians and occupy their colonies of Abyssinia (now Ethiopia) and Eritrea. In these battles, the British attempted to provide improvised air support to the ground forces. They used the obsolete Gloster Gauntlet fighter biplane armed with eight 10-kilogram bombs, which worked surprisingly well.

**ONE OF THE** reasons the Italians didn't attempt similar operations was that their fighters were ►



## DESERT WAR IN THE AIR

- ▶ generally only equipped with two machine guns, hardly enough to take on ground targets.

In December, British army units also counter-attacked in North Africa, supported by 200 aircraft. The offensive was highly successful and almost all of Libya was captured. As Italian aircraft intervened only sporadically, the British also had the opportunity to practise close air support, albeit on a modest scale.

But although the British were beginning to realise the benefits of air strikes in the combat zone, there was still a long way to go to make the concept work. Many problems had to be solved. For the pilots, who had no experience of low-level attacks, it was a matter of identifying targets. This was often difficult when units from both sides were close together. Hitting targets wasn't that easy either. There was also the threat of small-calibre fire from the ground. The low altitude rarely gave pilots time to parachute out if their plane was hit. The alternative was dangerous emergency landings.

**THE TACTIC ALSO** required effective communication between air traffic controllers on the ground and pilots in the air – from target acquisition to issuing strike orders. This was difficult because the army and air force had different traditions and priorities. In general, it often took a long time to deploy the aircraft, by which time the situation on the ground may have changed. Frustrated air force officers thought it was better to use the aircraft for more purely aerial tasks. Army commanders, on the other hand, wanted to determine target selection

**“In an ideal scenario, this would mean that ground units weren't exposed to enemy air attacks”**

and found themselves facing resistance from their colleagues in the air force.

Despite all these problems, the British still managed to utterly defeat their Italian opponent.

The Italian war effort did not impress the Germans. Worried that their allies would be forced out of North Africa, Germany's high command decided to send reinforcements. These were initially a motorised 'light' division and a single panzer division under the command of 'Desert Fox' Lieutenant General Erwin Rommel, along with elements of X Fliegerkorps. The air corps was based in Sicily in January 1941 and comprised 240 aircraft, including 60 Junkers Ju 87 Stuka dive bombers and 30 Messerschmitt Bf 110 twin-engine escort fighters. Both planes were ideally suited to ground attack, the Ju 87 because of its precision and the Bf 110 because of its high firepower. Messerschmitt Bf 109 fighter planes were also often used for ground attacks.

**UNLIKE THE RAF,** the Luftwaffe had been built around the task of supporting the army. Although the Germans favoured direct bombing, as such attacks were easier to carry out and often more effective, they were also well acquainted with

**An RAF technician checks 110-kg bombs before they are primed and loaded.**

RAF/IMPERIAL WAR MUSEUM (1R8/8)







## Bristol Beaufighter

★ Much of the Beaufighter's design was taken from the Bristol Beaufort torpedo bomber. This gave the heavy fighter a good load capacity and it was armed with four automatic cannons in the nose and six machine guns in the wings. The twin-engine plane, which had a two-man crew

and was also equipped with radar, was successful as a night fighter. In 1941, Coastal Command began equipping its variant, the Mk IC, with bombs. Fighter Command followed suit and the Beaufighter eventually became important and successful as an attack aircraft.

### Bristol Beaufighter Mk IF

Entered service	1940
Length	12.5 m
Wingspan	17.6 m
Engine	2x Bristol Hercules, 1,400 hp
Top speed	520 km/h
Range	2,400 km
Weight*	6,400/9,500 kg
Armament	4x 20-mm autocannons, 6x 7.62-mm machine guns
Payload	8x 76-mm air-to-ground rockets or 2x 450-kg bombs
*Empty/loaded	

close air support. In Poland in 1939, the Germans had already established a special attack unit with four Stuka flotillas that provided close air support to panzer units attacking in priority-designated areas.

For any North African operations, the first challenge was getting to the theatre of war. German ship convoys were threatened by British aircraft from bases in Malta, which were subsequently subjected to extensive German bombing. These battles immediately proved the effectiveness of dive bombers against specific targets with no fighter defences. On 9th February, Stuka planes attacked a British ship convoy bound for Malta and damaged the aircraft carrier HMS *Illustrious*. The following day it sank a cruiser.

**AFTER THE END** of the Battle of Britain in the autumn of 1940, both German and British fighter aircraft on both sides of the English Channel were left seeking new assignments, one of which was ground attack. The Germans attacked targets in England with small groups of modified fighters. These were called Jagdbombers (abbreviated to Jabos). Similarly, the British began conducting fighter sweeps over the French coast, with their fighters also attacking targets on the ground when the opportunity arose. Gradually, all the experience gained over the Channel front and the effects of the German 'pinprick attacks' filtered through to British air forces in North Africa.

Following the arrival of the German Afrika Korps in Tripoli, Libya, and the transfer of air units to

North Africa, Rommel went on the offensive on 31st March 1941. Initially, bad weather hampered flying – rain made air bases unusable.

The British Eighth Army couldn't compete with the masterful German campaign. While British soldiers had previously lacked air support, it was now the air force who wondered why the army was fighting so poorly. Rommel's tank columns infiltrated and outmanoeuvred the British units. Within a week, the British had been driven out of Libya, leaving a garrison in Tobruk under siege and subject to sustained German and Italian air attacks. But at the same time, Rommel's forces were not enough to complete the offensive. Tobruk held out.

**GRADUALLY, THE AIR** battles increased in intensity and the Stuka units suffered losses when attacked by British fighters. The desperate situation around Tobruk and the lack of their own ground forces led the British to take drastic measures. One of these was to try to stop German units using only fighter planes carrying out ground attacks.

Although these measures weren't sufficient, they helped the British to develop their close air support in earnest. In June, a small British offensive aimed at breaking the siege of Tobruk failed. One reason for the poor communication between ground and air forces was that their respective staffs were too far apart, making liaison and coordination difficult. During the summer, the war slowed down while waiting for reinforcements. Air combat was concentrated around Tobruk, with British aircraft ►



## DESERT WAR IN THE AIR

- ▶ protecting convoys to the city, which were in turn attacked by German and Italian aircraft.

While the Germans were only marginally reinforced, the British gradually built up their forces. The air force was reorganised as the Western Desert Air Force (WDAF) under the command of New Zealander Arthur 'Mary' Coningham. The role of the air force was made clear to the army, which should not expect direct fighter protection as it was considered a waste of air resources. Since fighter protection for all ground units simply wasn't possible, it was better to concentrate those fighters in battling enemy aircraft.

In an ideal scenario, this would mean that ground units weren't exposed to enemy air attacks. Once the army units had presented their plans and objectives, it was the task of the airborne units to support them in a way that was suitable for air operations.

Furthermore, a system similar to the German one was introduced, with air liaison officers at army corps level who would ensure that the wishes of ground units were translated into appropriate orders for air units. The changes resulted in a more efficient WDAF and the number of aircraft increased to 600.

The next British offensive began in November 1941. After fierce air battles, the Germans lost air supremacy and on the ground German and Italian units were forced to retreat. However, British fighter aircraft rarely attacked ground targets as they were busy escorting bombers or engaged in fighter combat. As the British advance continued, maintenance became more difficult and the aircraft fleet was worn down by constant relocations to new bases. After the Germans managed to get two convoys of reinforcements through in January 1942, Rommel seized the opportunity and launched a counteroffensive.

**ONCE AGAIN, THE** fortunes of war turned. The advances and retreats so characteristic of desert warfare now moved eastwards. Sustained German air attacks on Malta meant that further

**“The relevant manuals did not describe dive bombing or fighter operations against ground targets”**

reinforcements could be shipped across to North Africa. In June, Tobruk fell. But a month later, the German attacking force was exhausted and the offensive stalled. Fierce air battles raged over ground units – in a single week, the RAF flew 1,500 missions and lost 50 aircraft. The German pilots in their new Bf109 Fs were proving tricky opponents.

After the British reinforced Malta's air defences, the tide of war turned in the desert and the Germans continued to receive only a fraction of the reinforcements needed. But British aircraft not only attacked the German ship convoys to North Africa; the lorry columns were also attacked as they delivered supplies to the Afrika Korps along the long and exposed coastal route.

During the summer, both the British ground and air forces grew stronger. From December 1941, the United States entered the war, and the British could now be reinforced by US air units under the WDAF's direction. Cooperation between ground and air forces also improved, based on good communication between the commanders involved.

**A Hurricane Mk IID with 40-mm anti-tank autocannons practises firing at a tank. At El Alamein, their pilots claimed to have knocked out 39 tanks among other targets.**

**THE BRITISH WERE** now able to develop cooperation and close air support into a workable doctrine. Once air superiority was achieved, bombers attacked their targets in depth, while fighters with bombs and automatic weapons could attack targets such as support points, tanks and vehicle columns. By speeding up the order and communication routes, the time from order to action was reduced to within half an hour.

In August 1942, Lieutenant General Bernard Law Montgomery became the new commander of the Eighth Army. On 23rd October, he attacked El Alamein in Egypt. In this decisive battle, the WDAF







## Hawker Hurricane

★ In 1937, the first Hurricane fighters entered service with the RAF. By 1940, the aircraft was clearly inferior to German fighters and the British began testing it in other roles, including as an attack aircraft. Technical developments were also made to adapt the plane to its new role. A first major change was made to the Mk IIC, which gained bomb mounts under the

wings while replacing the machine guns in the wings with 20-mm autocannons. However, these proved ineffective against tanks and on the Mk IID were replaced by two 40-mm autocannons in pods under the wings.

The final version Mk IIE (later renamed Mk IV) had a choice of bombs, autocannons and air-to-ground rockets.

### Hawker Hurricane IIC

Entered service	1940 (Mk II)
Length	9.8 m
Spans	12.2 m
Engine	Rolls-Royce Merlin, 1,185 hp
Top speed	550 km/h
Range	965 km
Weight*	2,600/3,950 kg
Armament	4x 20-mm autocannons
Payload	2x 110-kg or 230-kg bombs
*Empty/loaded	

deployed over 1,000 aircraft against 300 German and Italian aircraft.

During the battle, the Allies flew more than 11,000 sorties and lost 97 aircraft, while the opposing side flew 1,500 sorties and lost 84 aircraft. There could only be one outcome.

During the Africa Korps' subsequent long retreat towards Tunisia, it was often subjected to devastating air attacks. That the Germans escaped at all was due to a skilful retreat combined with British caution. Montgomery didn't want to risk the dreaded Rommel counter-attack. Furthermore, the British found themselves occasionally having to wait for supplies to catch up with them.

**ON 8TH NOVEMBER** 1942, the Allies also launched Operation Torch, landing in Morocco and

Algeria to open a new front. Preparations for the invasion were carried out at relatively short notice, which also applied to deploying any involved US air units, which had to be shipped across the Atlantic.

Like the RAF, the US Army Air Force (USAAF) had entered the war with no clear idea of how best to use close air support. The Americans also prioritised bombers and the fight for air supremacy. The relevant manuals did not describe dive bombing or fighter operations against ground targets. Moreover, bombing targets had to be decided by the commander of the ground units being supported, which was perceived as cumbersome.

**THE LANDING SURPRISED** both the defending French units, who quickly switched sides, and the Germans. Once ashore, the Allied air forces ►





# DESERT WAR IN THE AIR

► totalling 1,700 aircraft were led by separate US and British air commands. Curiously, there was no cooperation between these commands, nor was the WDAF's experience in the east sought. Meanwhile, the Germans flew new air units into Tunisia. The ageing Stukas were supplemented by Jabos and the brand new Henschel HS 129 ground-attack aircraft. By the end of the year, the Germans had 300 aircraft and the Italians 50.

During the Allied advance towards Tunisia, its air forces ran into problems. Long distances, lack of airfields and poor maintenance and repair services made operations difficult. In addition, it rained a lot and the temporary bases were often flooded. The numerically inferior but qualitatively superior German air forces achieved local air superiority, exposing Allied units to direct attacks by Stuka and Jabos. On the Allied side, the need for better command structures and a new and common air force doctrine became increasingly apparent.

**IN JANUARY 1943**, Churchill and Roosevelt met in Casablanca to coordinate the British and US war effort. The conference also decided to change the command structure of the air force.

Air Chief Marshal Sir Arthur Tedder, who'd previously overseen RAF Middle East Command, now became commander of all Allied air forces in the Mediterranean. He was joined in Algiers by US General Dwight D Eisenhower, who led the Allied invasion forces. All Allied air forces in North Africa

were merged into the Northwest African Air Forces, which comprised five air commands: strategic, tactical, coastal, maintenance and training. These then included both US and British air units. An important organisational measure was that US commanders were given British deputies and vice versa. This greatly improved the previously poor coordination between the various Allied air forces. The British's positive experience of close air support was also developed for senior US commanders.

The new organisation allowed air power to be used more effectively. It continued to concentrate forces wherever they were needed, whether at the front or at a ground target, helping to increase the Allies' air superiority.

**IN MARCH, THE** Germans halted a British offensive largely because bad weather prevented air support. Montgomery then attacked again further west at El Hanna, this time with close air support. After medium bombers had initially dropped a carpet of bombs on the defences, 18 British air squadrons attacked with Hurricanes and Kittyhawks (US-built P-40s). German defences were attacked for over two hours every 15 minutes in waves, each containing two squadrons. Despite the loss of 15 aircraft due to small-calibre fire from the ground, the air strikes contained the defences so that the British attackers could break through.

Towards the end of the campaign, close air support was further developed within the Northwest

**A Kittyhawk Mark III from No 112 Squadron RAF at Medenine airfield in Tunisia in May 1943. The mechanic on the wing helps guide the pilot, who has very poor visibility on the ground.**

RAF/IMPERIAL WAR MUSEUM (IR 9/8)





African Air Force Tactical Air Command. It was now led by General 'Mary' Coningham. To shorten the time between orders and action, aircraft were trialled flying in holding patterns near the front. The pilots could then be called down to attack in a matter of minutes by radio from air officers following the ground units in armoured cars. The system became known as Rover Control or Cab Rank, referring to the aircraft formations.

**NEW MAPS, BASED** on aerial photographs, also improved accuracy, which in turn allowed targets to be attacked closer to their own units. In Tunisia, it enabled fighter-bombers to attack most types of targets: resistance nests, tanks, artillery positions, retreating units, vehicle columns, airfields and ships. A squadron of Supermarine Spitfires was also equipped with bombs and tested as fighter-bombers.

On 7th May, Tunis fell and on the same day the last German planes flew over to Sicily. The war in North Africa was over.

The Allies' favourable experience in the final battles in Tunisia led to a new USAAF manual in July 1943: *FM-100-20, Command and Employment of Air Power*. This set out the objectives, doctrine, organisation and command relationships of a tactical air force. It emphasised that army and air force units were fully equal. It stressed that a central command was the prerequisite for being able to prioritise and concentrate air operations against important targets and exploit the effectiveness

## “Close air support was now a fully developed concept proven to be effective”

of strike aircraft. Responsibility for coordinating both ground and air units would lie with an area commander. Furthermore, the order of priority was established: air superiority, bombing enemy troops and supplies, and finally close air support.

Although close air support was only mentioned third, it was now a fully developed concept, proven to be effective. The desert battles had clearly demonstrated that ground units exposed to direct air attacks were extremely vulnerable and would sooner or later be defeated. Thanks to close air support, the Allies later achieved great success in the decisive campaigns in north-west Europe.

Having started the war with the best air force in the world, the Germans attained air supremacy, with fighter-bombers chasing and attacking any target they could spot. By the end of the war, the warning cry “*Achtung Jabos!*” became very common and feared among the German army. ★

**Marco Smedberg** is a writer specialising in military history.



### Curtiss Kittyhawk

★ In 1941, the US Curtiss P-40 Warhawk fighter became a welcome addition to the Desert Air Force, which had not yet received any Spitfires to compete with German fighters. The Tomahawk (the British name for the aircraft) performed well against early German and Italian fighters.

In early 1942, a new model, the P-40D, was introduced and named the Kittyhawk. It had a better

engine, armour and weaponry, plus three attachments for bombs. The Kittyhawk was mainly used as a bomber escort and for strike missions. In the latter role, it suffered heavy losses against German Bf 109s, giving the aircraft a bad reputation.

The aircraft depicted belongs to the RAF's No 112 Squadron, which was the first Allied unit to apply the shark jaw paint to the aircraft's large air intake.

#### Kittyhawk IA (P-40E)

Entered service	1942
Length	9.7 m
Wingspan	11.4 m
Engine	Allison V-1710, 1,150 hp
Top speed	580 km/h
Range	1,100 km
Weight*	2,750/4,000 kg
Armament	6x 12.7-mm wing-mounted guns
Payload	Total max 900 kg of bombs
*Empty/loaded	



**El Alamein 1942**

# BRITISH WATERSHED

Under General Bernard Law Montgomery, the fractured British Army regained confidence and turned the tide of the war by defeating Rommel's German-Italian forces in North Africa.

Text: **RASMUS KJÆRBYE PETERSEN**



Led by an officer, British  
infantry attack through  
dust and smoke at  
El Alamein.





# BATTLE OF EL ALAMEIN

**A**fter the retreat from Dunkirk in June 1940, things looked bleak for Britain. The Royal Navy and RAF had prevented an invasion of the homeland, but after the defeats in Norway and France, few believed that the British Army really had what it took to resist the Germans.

And things got even worse. In September, a 200,000-strong Italian force entered Egypt, which Benito Mussolini wanted to annex to his new Roman Empire. With only 36,000 British soldiers to defend the Suez Canal, it looked like being another disaster. But after an advance of 60 kilometres, the Italians halted and didn't move for three months.

**IN DECEMBER, THE** British tried to push the Italians back towards the border. The move went beyond expectations; the Italian resistance collapsed in a matter of days. The surprised British chased them 800

## "CHURCHILL AND HIS GENERAL STAFF BECAME OBSESSED WITH BEATING ROMMEL"

kilometres into Libya, taking 130,000 prisoners in just over two months, as well as 850 guns and 400 tanks as spoils of war.

The success somewhat restored faith in Britain's military strength. It no longer sounded like wishful thinking when Winston Churchill spoke of a final victory against the Axis powers. The British superpower had risen like a phoenix from the ashes.

Adolf Hitler wasn't particularly concerned about the war in North Africa. His focus was eastwards, towards the Soviet Union. It was there he wanted to secure the resources (mainly oil) needed for his Third Reich – not in the Middle East. On the other hand, he could not allow an Italian defeat in the desert. Not only would it be humiliating for the Axis powers, but it would also revive the British threat that he thought had been eliminated. The British had already sent desert army units to Greece (where Mussolini's latest military adventure had stalled), giving them a foothold on the continent once again.

So, the Germans sent a small force to Libya, whose sole purpose was to prevent the fall of Tripoli. But the man Hitler appointed to the task had other plans. Erwin Rommel was a stubborn general who believed that attack was the best defence. In March 1941, before the Afrika Korps was even assembled, he launched an offensive. The British were unprepared and driven back towards Egypt within two weeks.

This new military setback (combined with defeat in Greece) put Britain on the back foot again. It seemed that the British Army could handle Italian colonial troops, but not even a small German armoured unit. Only the Royal Navy's ability to break the German-Italian supply lines across the Mediterranean, bolstered by control of Malta and the Australian 9th Division's defence of the port city of Tobruk, halted Rommel's triumphal march to Suez.

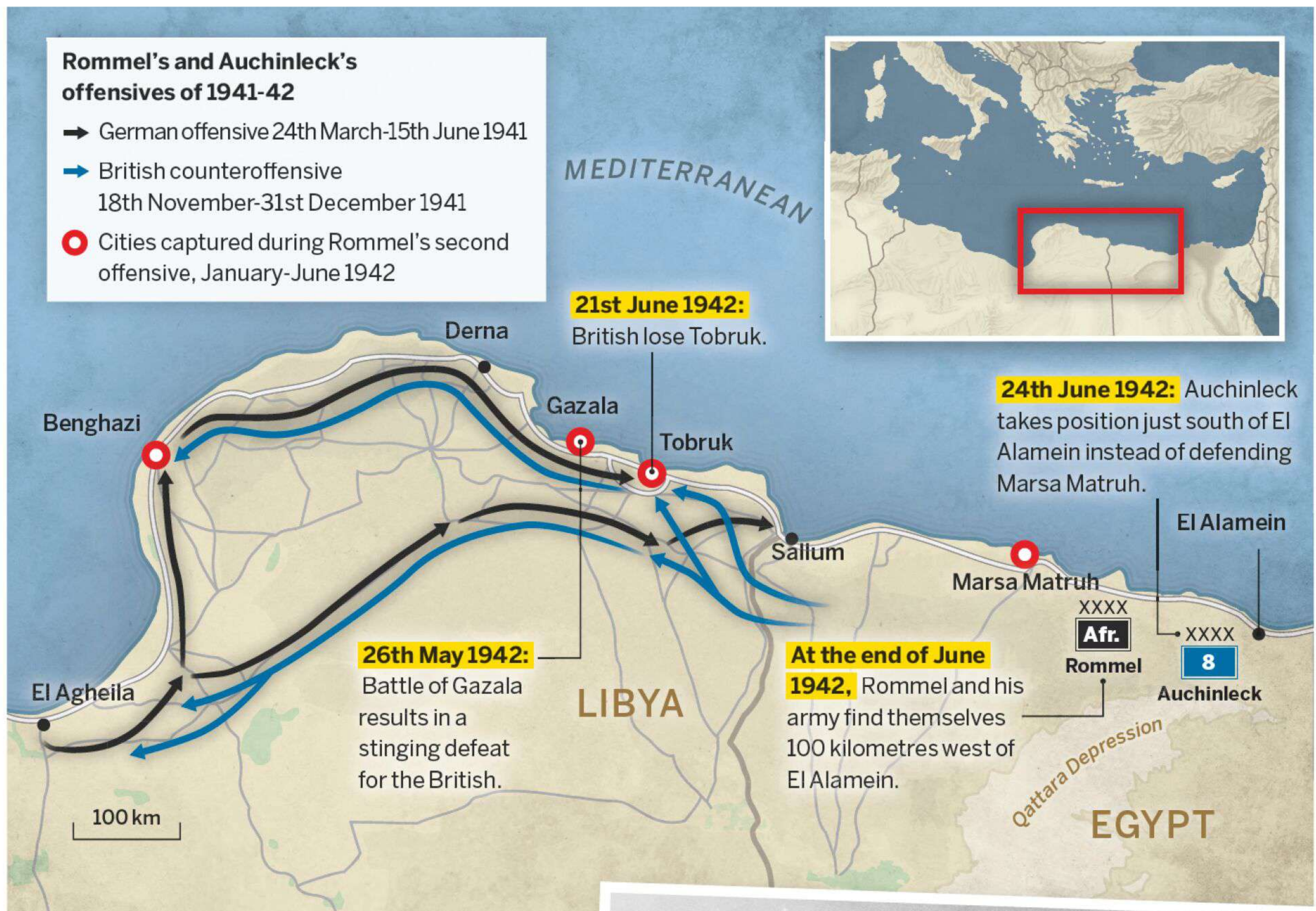
Churchill and his general staff became obsessed with beating Rommel. With the Germans' and Italians' dismal supply situation in North Africa, it should have been a piece of cake. If the British Army couldn't even manage that, it might as well give up.

**BUT THE DESERT** army could not deliver. No soldier in the world could defend a fortified

**Erwin Rommel arrived in North Africa in spring 1941.**







position as well as a British one could, but when it came to manoeuvre warfare, which the Germans had almost perfected, the British could not keep up – mentally or materially. This was demonstrated only too well during British offensive operations in May and June 1941. On both occasions, British tanks became confused in German ambushes and were massacred by anti-tank guns.

**CHURCHILL WAS NOT** happy. He sacked the commander-in-chief and brought a new general, Claude Auchinleck, from India to take over the Middle East Command. Auchinleck was capable and hadn't been affected by the desert forces' defeatism. But he failed to select competent commanders for what was now renamed the Eighth Army.

After a long period of preparation, Auchinleck launched an offensive in November. Rommel was forced to retreat towards Libyan ports under Italian control. Still, it was not a very satisfying victory, because it was the result of superior numbers and supply lines – not military skill. Rommel proved this as soon as his supply issues were resolved, by striking back in January 1942.

Now the British had to retreat towards Gazala in Libya, where Auchinleck established a strong



defence line. But at the end of May, Rommel went around the line by crossing the open desert. The Eighth Army had to flee to avoid being surrounded.

Frustrated with his commanders, Auchinleck personally took command. That the commander-in-chief of the entire Middle East could not trust his subordinates was a serious failure of the Eighth Army's officer corps. The responsibility was too great to be shouldered by one man, however, and the workload caused Auchinleck to overlook critical details. Moreover, he soon realised that it was one ➤

**Most of the British Matilda tanks were wiped out during Rommel's 1941 offensive.**



# BATTLE OF EL ALAMEIN

ROGER VIOLETTE/GETTY

German Panzer IIIs roll through the Libyan desert on their way to El Alamein, February 1942.



► thing to give orders, but quite another to get corps and divisional commanders to obey.

From Gazala, the Eighth Army fell back towards Marsa Matruh in Egypt. Tobruk was lost virtually unopposed on 21st June; Churchill had made much of the port city's defence against Rommel's siege in 1941, so the loss was particularly hard to digest. Added to this were several military disasters in the Far East in early 1942, and the prime minister was facing a vote of no confidence in parliament. After defending himself, Churchill travelled to Egypt to restructure the Eighth Army himself.

Auchinleck had fallen victim to the same spirit of defeat that plagued his army. He gave up Marsa Matruh without a fight, and continued the retreat towards El Alamein. It was so hasty that the 2nd New Zealand Division – the army's best – was almost left behind. They had to fight their way out of the looming German encirclement on their own.

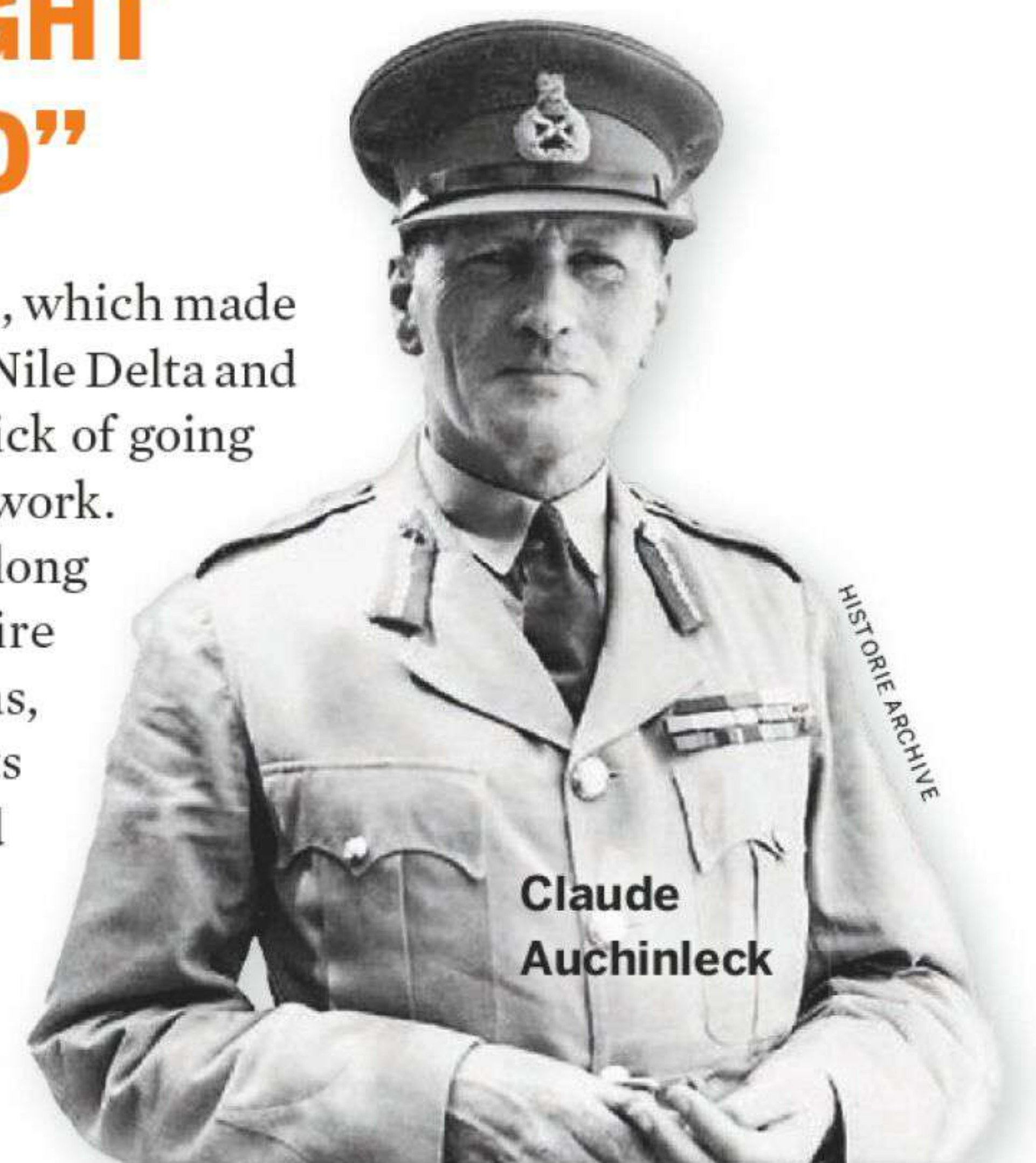
**THE REASON AUCHINLECK** favoured El Alamein was because it could not be bypassed, like Gazala and Marsa Matruh. Forty kilometres from

**“ON 31ST JULY, AUCHINLECK REALISED THAT THE ARMY'S CAPACITY TO FIGHT WAS EXHAUSTED”**

the coast was the Qattara Depression, which made El Alamein a bottleneck between the Nile Delta and the open desert. There, Rommel's trick of going around the British flanks would not work.

But a 40-km defence line was too long for the Eighth Army to man the entire stretch. So, Auchinleck ordered areas, called boxes, to be filled with dugouts and surrounded by mines and barbed wire, from the coast to Qattara. If the enemy passed between them, they'd be caught in devastating crossfire.

Rommel could not allow the British to dig in, so launched his



Claude Auchinleck

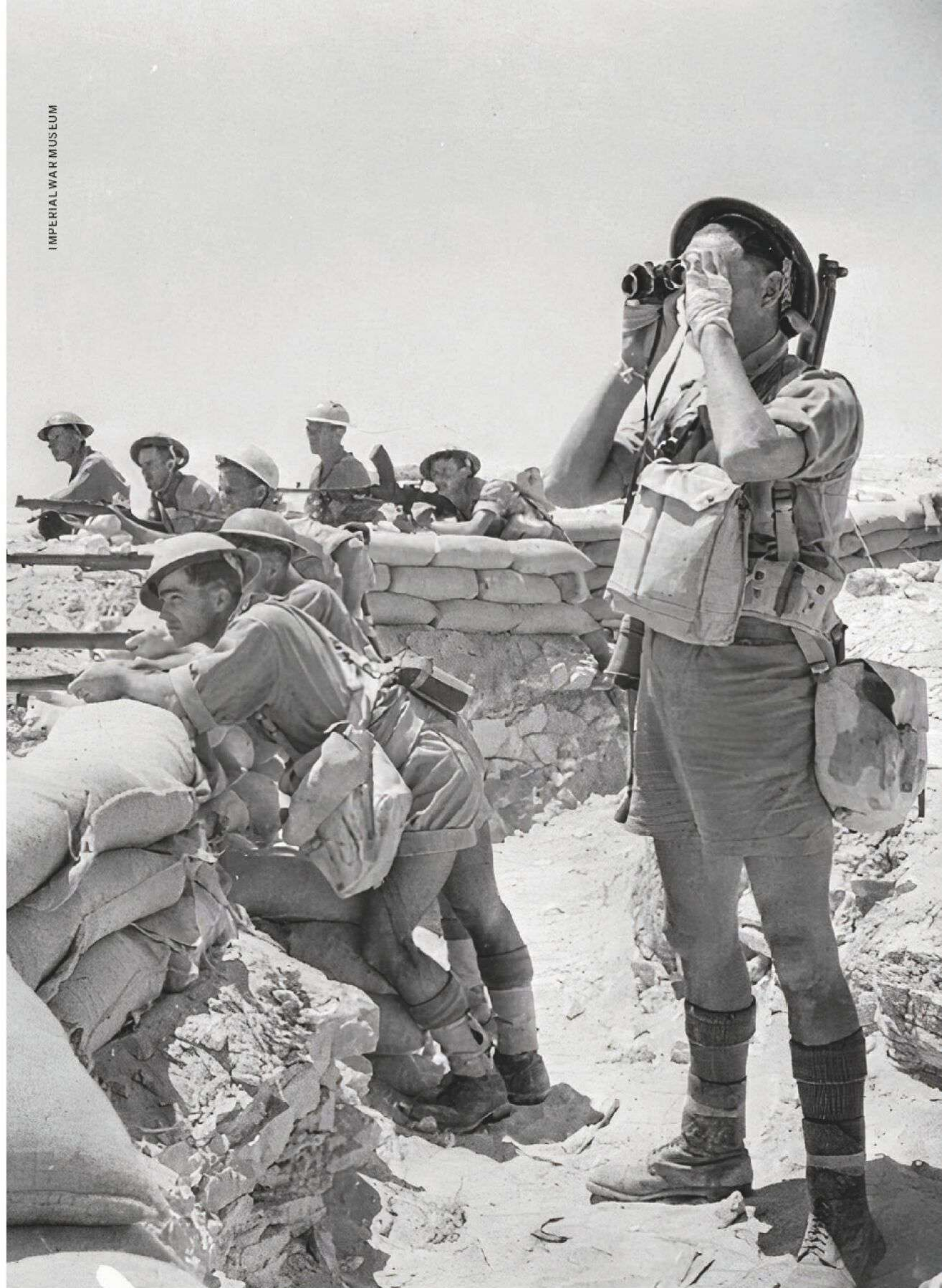




attack on El Alamein as soon as his reserves arrived at the end of June 1942. He managed to capture some tactically important heights at the western end of the position, such as Miteirya, but when he tried to break through Auchinleck's line on 1st July, he failed. The German forces were exhausted after storming through the desert and attacking fortified positions without rest.

**AUCHINLECK, WHO HAD** regained his courage, now attacked. After all, El Alamein was not just to be defended. The idea was to launch a final counteroffensive from there, so Auchinleck could not let the enemy's defence positions become too strong. The last three weeks of July saw the launch of a series of operations, with the British struggling to regain the heights they had allowed the Germans and Italians to capture in the first confused days.

Some of the attacks were successful, but in general the operations were characterised by poor planning and a lack of coordination. On 31st July, Auchinleck realised that the army's capacity to fight was exhausted, and that all



attempts to dislodge the enemy had to be suspended for the time being. Thus, the first battle of El Alamein was over.

On 3rd August, Churchill arrived in Cairo on his way to meet Stalin. He was accompanied by General Alan Brooke, chief of the general staff. Both were determined to revitalise Middle East Command, and they agreed that this could only be achieved by getting rid of Auchinleck. He was sent back to India and Harold Alexander was chosen as the new commander-in-chief Middle East.

But Churchill and Brooke could not agree on how to deal with the Eighth Army. Brooke wanted to dismiss all the senior commanders, while Churchill argued that this could destroy morale. Instead, the prime minister appointed one of the backward-looking generals that Auchinleck had endured as army commander, leaving the command structure unchanged.

**BUT TWO DAYS** later, the Luftwaffe intervened. Two Bf 109 fighters shot down a Cairo-bound flight carrying Churchill's designated general. This ►

**The British set up a line of so-called boxes to catch the Germans in crossfire, 17th July 1942.**



# BATTLE OF EL ALAMEIN

► cleared the way for Brooke and his choice: Bernard Law Montgomery.

Montgomery took command of the Eighth Army on 13th August and threw himself into the task. In his eyes, the problem was morale, so one of his first acts was to order all troop transport vehicles 110 kilometres behind the front. He wanted to make it clear that there was no way back from El Alamein.

**THIS WAS FOLLOWED** by a rigorous training programme aimed at restoring the soldiers' faith in themselves and the army. And it worked. Montgomery may have been an untested general, but he showed that the army leadership was taking the task seriously, which encouraged the men.

When Churchill returned to Egypt on 21st August, he noted a "complete change of atmosphere" in the Eighth Army. Even Rommel felt the balance of power shifting. The supply situation was still desperate, while new and better weapons were flowing to his opponents. He had to either advance or withdraw. The latter was politically impossible, and the former would become militarily impossible if he did not strike immediately.

**ON 31ST AUGUST**, the German-Italian forces launched their final offensive. Rommel

wanted to break through the British line in the south, then turn north and surround the Eighth Army. But now the strength of Auchinleck's defensive plan, which Montgomery had built upon, was revealed. The Afrika Korps drove straight through a mined corridor lined with anti-tank weapons at the foot of the Alam el Hafa hill. Losses were so heavy that Rommel had to turn north earlier than planned.

Montgomery had realised where the Eighth Army's strengths and weaknesses lay. Instead of facing Rommel's armoured divisions with tanks in open battle, he had them stand in semi-covered positions behind Alam el Hafa and act as stationary anti-tank guns. The German attempt to break through failed, and on 2nd September, Rommel was forced to order a retreat.

The tanks needed to hold their ground while Montgomery pressed the flank of the German front with his infantry. Thus, in the eyes of many later writers, he passed up a golden opportunity to destroy the Afrika Korps. But he did not think his forces were up to the task, and all he wanted to prove was that Rommel could be stopped. As Montgomery put it, the goal was simply not to be defeated.

After Alam el Hafa, the offensive power of the German-Italian

When Montgomery took command of the Eighth Army, it was characterised by a spirit of defeat.





forces was exhausted. The initiative now lay with the British. The question was when the attack would take place. Montgomery planned a massive infantry assault across a wide front to clear a way through the German-Italian minefields. It would be done at night to minimise losses (night attacks were one of the British Army's strengths), but to have enough light for the task, the assault required a full moon.

**CHURCHILL, IN DESPERATE** need of a British victory, pushed for an attack on 24th September, but Montgomery argued that this didn't allow enough time. He preferred 23rd October – and would not be swayed.

The operation, which someone humorously dubbed Lightfoot because of the large minefields that had to be crossed, was neither more complex than nor fundamentally different from Auchinleck's offensive. The major difference was that the Eighth Army was to concentrate its forces, make thorough preparations beforehand and not rush headlong into battle.

Montgomery drew three lines on the map. The first, which he called the Oxalic Line, ran behind the minefields along the tactically important Miteirya Ridge and the eastern end of Kidney Ridge. The next, the Pierson Line, ran a few kilometres behind Oxalic, deep inside the German-Italian defence zones. Finally, Montgomery drew an oval, called Skinflint, which covered the Rahman Track behind

## “CHURCHILL, IN DESPERATE NEED OF A VICTORY, PUSHED FOR AN ATTACK ON 24TH SEPTEMBER”

enemy lines – the primary line of communication to the south.

**THE PLAN WAS** for XXX Corps' infantry divisions to clear a path through the minefields and into the enemy's main battle line at Oxalic. From there, the armoured forces would break through to Pierson and defeat the inevitable armoured counter-attack that would come at dawn. Then they would advance deep into German-Italian forces territory towards Skinflint. There the armoured divisions would be able to move freely against the rear of the enemy troops and hopefully surround and destroy them.

It was over-optimistic of Montgomery to think they could reach Pierson on the first night. Other than that, it was a solid plan. The fighting around the Pierson Line would cost both sides dearly in terms of tanks, but Montgomery was confident that he had the necessary resources to continue until the Germans ran out of ammunition and fuel. He was a general of the old school, and his aim was to fight ►

## Eighth Army's tanks were inferior

★ The British had been pioneers in tank theory during the 1920s, but economic restraints prevented them from producing materiel. For want of anything better, the army developed heavy infantry tanks to break through enemy lines, and light cruiser tanks to exploit the gaps. As

the threat of war grew, the British focused on building the cheap cruiser tanks. But they became vulnerable as the Germans upgraded their own tanks with bigger guns in 1940-41. On top of that, the British had not developed larger anti-tank guns in time, and all their tanks had to be

equipped with the rather inadequate 40-mm QF 2-pounder.

Against Italian tanks, the British did well, but had problems with the modern German models. This was not resolved until heavier US tanks and larger British anti-tank guns arrived in 1942.



A Crusader Mk IV light cruiser destroyed by German anti-tank fire.



The Valentine Mk III infantry tank's gun was inadequate.



The US M3 Grant's 75-mm gun was a formidable foe against German tanks.



# BATTLE OF EL ALAMEIN

► a materiel battle of the kind that broke the German Army in 1918.

**MONTGOMERY DID NOT** understand blitzkrieg, and recognising that fact, did not plan the pursuit phase that would begin when they reached Skinflint. He left that to the experts: the Eighth Army's armoured commanders. On their advice, X Corps under General Lumsden was reorganised purely as an armoured unit.

It was a step in the wrong direction compared to the German doctrine of combining different armed services. Rather, it reflected the romantic self-image of the tank commanders as modern cavalry, who would hunt down the defeated enemy after the infantry had done all the heavy lifting. Montgomery, on the other hand, expected X Corps to assume primary responsibility for fighting the enemy.

This contradiction was never resolved. Lumsden and his officers did not argue with Montgomery, but had no intention of following orders they considered unrealistic. Montgomery did not realise the extent

of this reluctance, and thought that the armoured commanders would fall in line. This almost cost him as much as several of his predecessors had lost.

Montgomery's plan for getting the Eighth Army ready for the offensive was training, training and more training. This would harden the soldiers in desert conditions and familiarise them with the plan and their role. A replica of the German front lines was built, complete with mines and barbed wire. Here, entire army units would undergo gruelling and hyper-realistic exercises to learn how to clear mines in the dark of night – often under heavy fire. In this way, effective mine clearance procedures were developed and mastered by the men.

The Eighth Army was a multinational force of British, Australians, New Zealanders, Indians and South Africans, with Free French, Polish and Greek forces. Previously, they had not been a cohesive unit with a common sense of identity, but now they were.

The attempt to bring the branches of the armed forces together also succeeded in the case of the Desert Air Force (DAF). But the armoured troops

The Germans feared the British artillery. Here, a QF 25-pound howitzer, the most common field piece used by colonial troops, is being loaded.





remained coolly aloof. The decision to bring them together in X Corps only served to exacerbate the differences between them.

Montgomery had decided that each infantry division in Lightfoot would have an armoured brigade as a support unit. But X Corps preferred to train on its own, without the other corps. There was only one exception to this unfortunate situation.

**THE BRITISH 9TH** Armoured Brigade had recently arrived in the desert, so had not been affected by the club culture of X Corps. When it became the support unit to the 2nd New Zealand Division, it was more than willing to fulfil the mission. And the New Zealand commander, General Freyberg, who had been furious at the lack of tank support, was equally keen to integrate the 9th Brigade into his division. The brigade's officers and men participated not only in the division's exercises, but also in social events, which led to them painting the New Zealand fern on their tanks. Freyberg was proud to write to the New Zealand government and say that the

2nd Division was now "more powerful than a Panzer division".

Operation Lightfoot began at 21.40 on 23rd October 1942. The artillery, the only British force that the Germans considered superior, opened fire according to a carefully calculated plan. Many German officers felt like they were back in the trenches of World War I as the shells rained down on them. After a 15-minute bombardment of selected positions, the firing ceased for five minutes, while the guns set their sights on the German-Italian minefields in front of XXX Corps. At 22.00, the artillery thundered into action again, sweeping through the mines.

**UNDER COVER OF** the barrage, the infantry emerged from of their trenches and began the hair-raising push through the minefields. Four divisions advanced across a front more than ten kilometres wide. The 1st South African and 2nd New Zealand Divisions would cover five kilometres to Miteirya, while the 51st Highland and 9th Australian ►

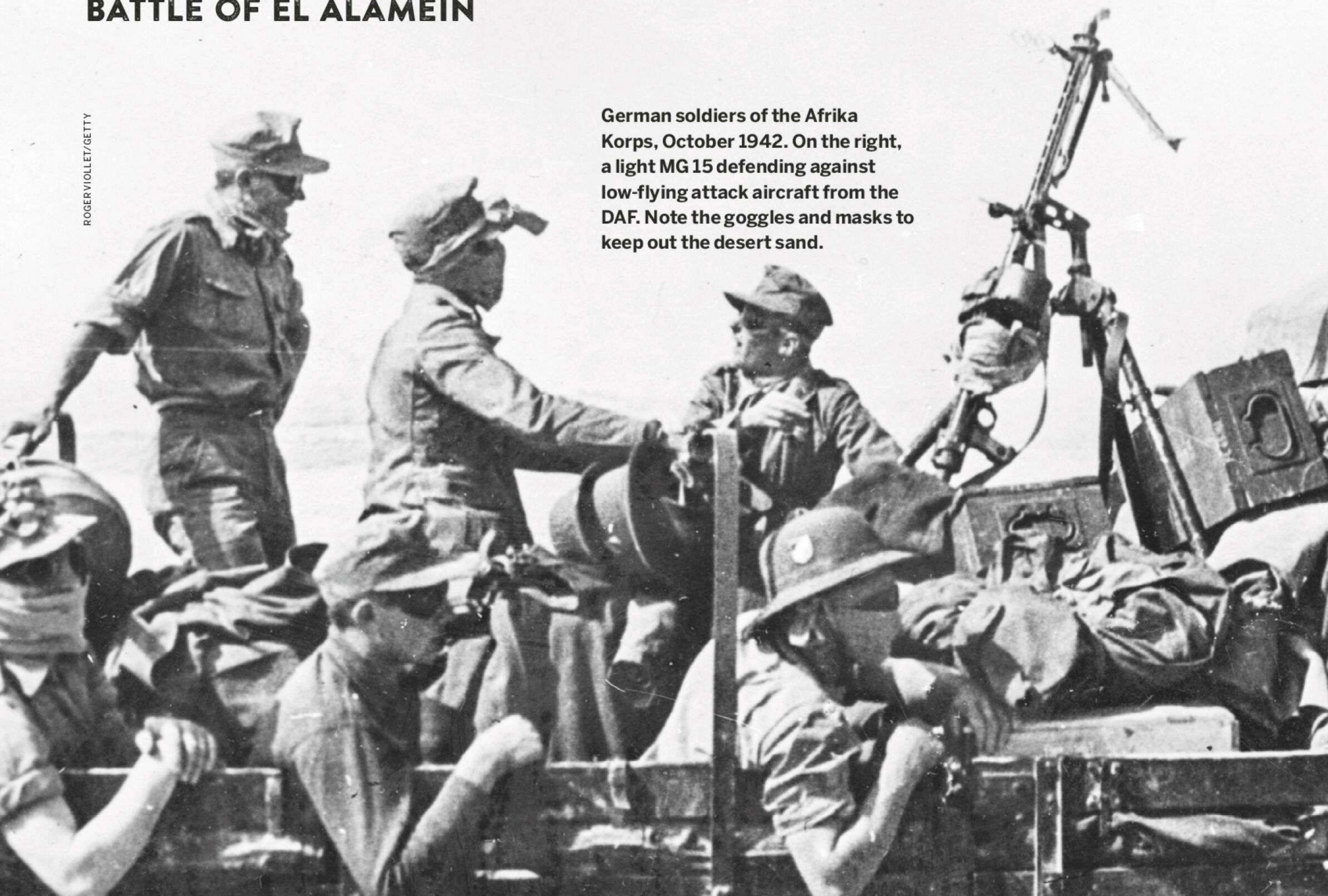


**"THE ARTILLERY WAS  
THE ONLY BRITISH  
FORCE THE GERMANS  
CONSIDERED SUPERIOR"**



# BATTLE OF EL ALAMEIN

ROGERVIOLETT/GETTY



German soldiers of the Afrika Korps, October 1942. On the right, a light MG 15 defending against low-flying attack aircraft from the DAF. Note the goggles and masks to keep out the desert sand.

- Divisions would cross six kilometres of open desert to the Oxalic Line on either side of Kidney Ridge.

Above them flew the DAF. Albacore torpedo bombers lit up enemy lines with signal flares, while Hurricane fighters dived towards gun positions and ageing bombers jammed radio traffic. Combined with the artillery cutting telephone lines, almost all communications in the German-Italian forces broke down.

**ON THE SOUTHERN** part of the front, the attack went to plan. The New Zealanders, who'd trained hard and coordinated with tanks and artillery, got to Miteirya on time. The South Africans reached their objective at 05.00, slightly delayed after suffering losses on the way. A corridor was cleared through the minefields for the 10th Armoured Division.

In the north, things were not so straightforward. One Australian brigade had come under heavy fire and the promised tank support was delayed. By dawn, when the division was forced to dig in, only the northernmost brigade had reached Oxalic.

The Highland Division fared the worst. It had the least experience of the four, yet had been given

## “MONTGOMERY CHASTISED LUMSDEN FOR HIS LACK OF SUPPORT DURING THE NIGHT”

responsibility for the widest and deepest section of the front – a mistake on Montgomery's part. The Highlanders came under heavy artillery fire (possibly from the British) and had to cross some of the enemy's densest minefields. As a result, they suffered heavy losses, and their advance was held up so much that only a few troops reached their objective. The rest of the division was still 1-1.5 kilometres from the Oxalic Line when sunrise forced them to take cover.

The first phase of Lightfoot had been a partial success. But in the second phase, things started to go seriously wrong.

X Corps had not fulfilled its part of the brief. The support that it should have given to the infantry had failed in several places. This was not due to any malice on the part of the armoured troops,



but the lack of training meant that the necessary procedures for liaising with the infantry were not in place. Many tanks got lost in the dark of night and ended up in uncleared minefields. Instead of finding their way back to cleared corridors or clearing new routes themselves, most armoured brigades just stopped and waited for help.

**THE FACT THAT** routes were not cleared all the way to Oxalic on the northern part of the front gave Lumsden an excuse not to begin his advance towards the Pierson Line. But in reality, his divisional commanders were reluctant to attack fortified positions. They feared becoming targets for enemy anti-tank fire.

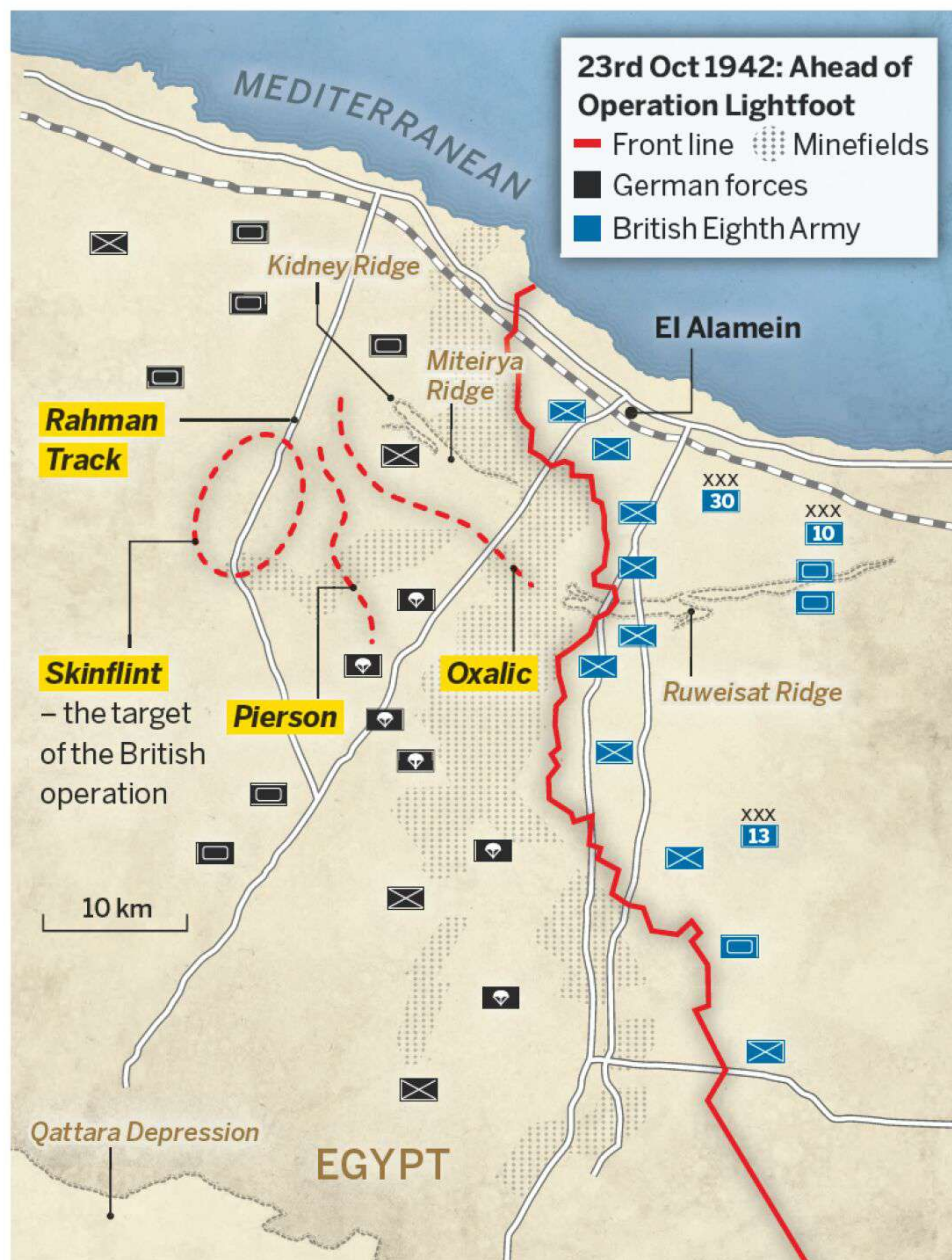
Montgomery didn't disagree but saw these as acceptable losses. It was a war of attrition, and if care was taken to inflict similar losses on the enemy, the side with the most resources would win in the end. Several confrontations arose between him and Lumsden, and each time Montgomery felt that he had put his corps commander in his place without actually having done so.

The German-Italian forces reacted slowly. Rommel, in poor health, was recovering in Germany and had handed over command to General Georg Stumme. He was a cautious commander who never made a decision without having all the relevant information. Because the British had blocked army communications, Stumme could not tell whether the advance on Miteirya or the British XIII Corps' diversionary manoeuvre in the south was the real threat. Fuel reserves were too low to move the panzer divisions more than once, so he waited until he had a clearer picture.

Stumme was so frustrated with the lack of information that he went to the front to see what was happening with his own eyes. This is what Rommel would have done, but Stumme was unlucky and died of a heart attack when he got too close to the action. His death added to the confusion and left the German-Italian forces without clear leadership. They were lucky that the British did not take advantage of the situation, as X Corps made no attempt to reach Pierson. By the time Lumsden and his officers were finally ready to make the move, the enemy had regained its footing.

Montgomery chastised Lumsden for his lack of support during the night and made it clear that the advance on the Pierson Line would now have to be made in daylight. Nevertheless, he focused on pushing the Australians and Highlanders towards their objectives. His methodical approach required the full length of the Oxalic Line to be captured before the second phase of his plan could begin.

So, the Highlanders had to move on before the sun had set, because they had the longest distance



to cover. The Germans had overcome their initial paralysis and the advance was costly. But with artillery support, the Highlanders were able to reach most of their targets along the Oxalic Line during the night.

**THE AUSTRALIANS WAITED** until nightfall. Patrols had encountered only weak resistance from the Italian positions in front of them, so the divisional commander, General Morshead, decided to cease artillery fire to surprise the enemy. The

**A Kittyhawk Mk III attack aircraft from the DAF takes off during Operation Lightfoot.**







LEN CHEI WYN/IMPERIAL WAR MUSEUM

**Soldiers of the 9th Australian Infantry Division stage an attack for the photographer during training behind the front line.**

► ruse succeeded beyond expectations. Within a few hours, they had captured all their objectives at Oxalic – with minimal losses.

As the Highlanders and Australians approached their destinations, the road was cleared for X Corps. Large numbers of tanks began to roll through the narrow corridors in the afternoon, although they came under constant artillery fire.

**NEVERTHELESS, AT AROUND** 16.00, the 2nd Armoured Brigade was able to pass the Highlanders' positions and begin their attack. Just one hour and 20 minutes later, to Montgomery's delight, they reported that they had reached the Pierson Line. But the joy was short-lived. Although the division had reached Kidney Ridge, the western end of which was on Pierson, they had only taken the eastern part.

They had also discovered that Kidney Ridge was in fact a depression in the terrain. The staff who had named it had misinterpreted the kidney-shaped contours on the maps. But that didn't make the position any less significant. The depression was ideal for tanks to dominate the surrounding terrain from semi-covered positions. But as long as the Germans held the slopes to the west, it could not be exploited.

At 16.00-17.00 on 24th October, the 10th Armoured Division began its advance from Miteirya, more than 12 hours after the infantry had captured the hill. The delay had given the Germans time to deploy anti-tank guns and lay some makeshift minefields behind Miteirya. Instead of the audacious assault on Pierson that Montgomery had envisaged, it was another cautious grope in the darkness, with minesweepers leading the way.

After a lucky hit by German bombers lit up Miteirya Ridge, the silhouettes of the 8th Armoured Brigade appeared on the hillside. They became the perfect target for German anti-tank guns, which slaughtered the thinly armoured British tanks. The 8th Brigade withdrew while the 24th Brigade, the division's other spearhead, stayed on the other side of the minefield without informing headquarters.

**DURING THE NIGHT,** the 9th Armoured Brigade made the most progress. The 8th Brigade had attracted enemy fire, enabling the 9th Brigade to advance almost three kilometres without significant resistance. The brigade commander, General Currie, was convinced that Pierson could be reached as planned. It therefore came as a shock when he was ordered to withdraw to Oxalic. The setbacks of the other two brigades meant that the



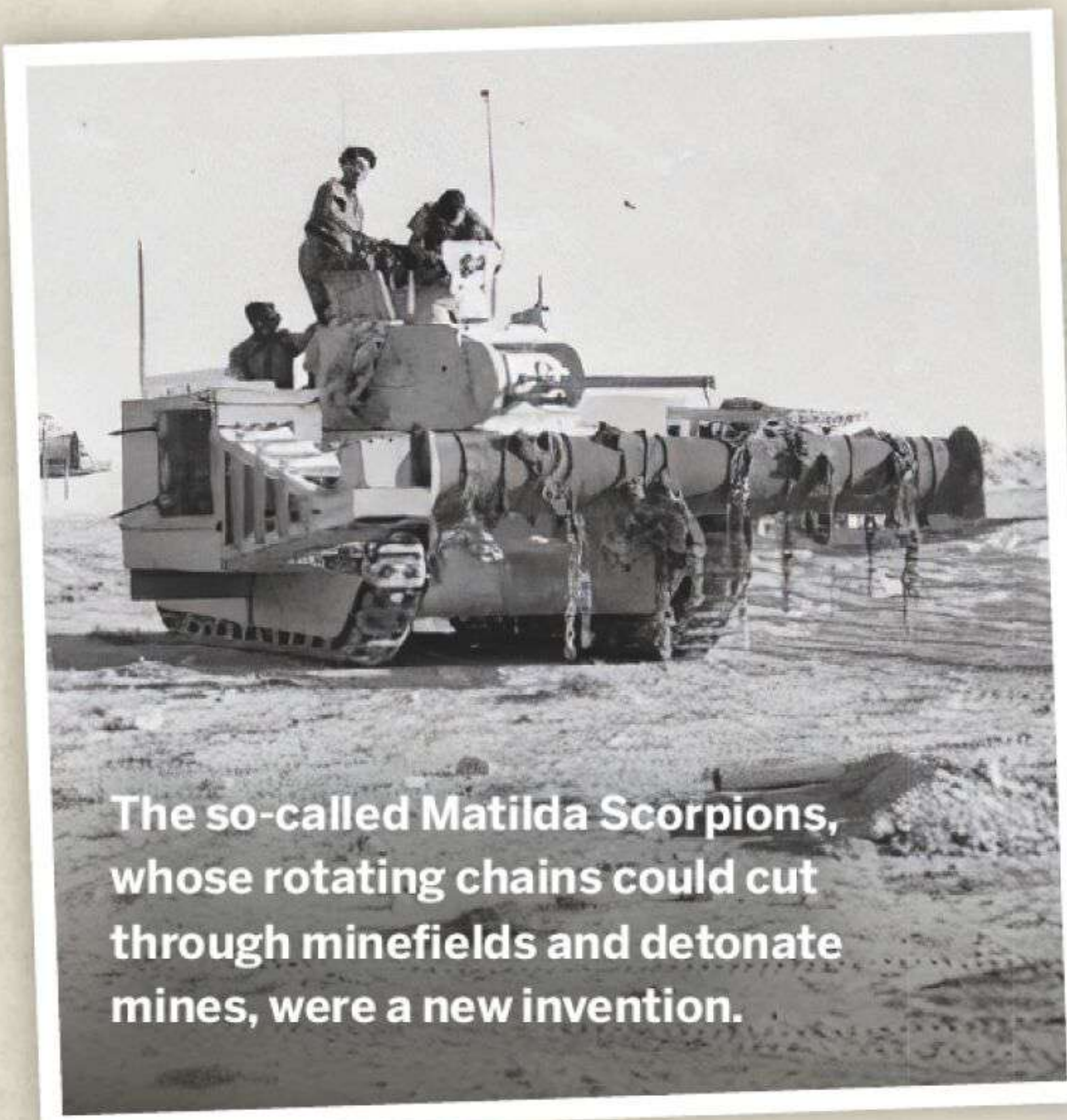
## Devil's gardens were full of mines

★ To protect the defence lines, the German-Italian Army laid half a million mines at El Alamein, known as Rommel's devil's gardens. 360,000 of these were British anti-tank mines (less dangerous to dig up than anti-personnel mines) recovered at Gazala and Tobruk. The German general assumed the enemy would attack

with tanks at the fore, so he didn't bolster the minefields with machine-gun nests. Montgomery took this into account and planned Operation Lightfoot with infantry at the front.

The devil's gardens contained just over 14,000 anti-personnel mines, concentrated around key positions. The German S-mines, which

were launched into the air before detonating and spreading a cloud of deadly shrapnel, were particularly feared. But the British infantry had trained intensively and suffered few casualties from mines during the advance.



The so-called Matilda Scorpions, whose rotating chains could cut through minefields and detonate mines, were a new invention.

The Eighth Army was equipped with some of the first practical mine detectors, the Mine Detector (Polish) Mk I.



9th Brigade's advanced position was considered too vulnerable by senior commanders.

When Montgomery learned on the morning of 25th October that the 10th Armoured Division had not only failed in its task, but had also withdrawn to its starting point, he clashed with Lumsden yet again. Montgomery realised the general could not be counted on, at least when it came to attacking strong enemy positions. His plan for Lightfoot had failed.

General Freyberg, whose distrust of the armoured forces had been reaffirmed, suggested that X Corps should be ignored and the infantry left to solve the problem. The New Zealander wanted to make another night attack on the Pierson Line with foot soldiers, but Montgomery had no reserves available. His best infantry divisions were already in action.

Instead, Montgomery decided that the 9th Australian Division, which had suffered the least losses, should change course and attack northwards. Operation Lightfoot had created a wide bulge in the enemy lines, and the Australians would straighten the front by fighting their way to the coast.

However, straightening the front was not Montgomery's primary focus. He believed that

## “MONTGOMERY HAD NO RESERVES AVAILABLE”

the Australian attack would attract German-Italian reserves, which would thus be spent. In other words, he wanted to conduct the attrition phase of the battle with the 9th Division instead of the reluctant armoured forces. This would cost the Australians dearly, but in his eyes, it was a price worth paying for victory.

**THE ATTACK ON** 25th and 26th October started well for the 9th Division. The change in direction struck at the enemy's rear, and the Australians succeeded in capturing German maps showing the route through the minefields. This enabled a small motorised advance party to capture the tactically important Hill 29 before the enemy rallied. But then the tide turned.

Rommel reached El Alamein on 26th October. After a quick survey, he was convinced the new attack to the north was the greatest threat. He ►



# BATTLE OF EL ALAMEIN

► ordered his armoured reserves to use up their precious fuel to beat back the Australians. Thus, Montgomery's objective in turning north succeeded. Had he stayed there, it might have been seen as a stroke of genius.

**UNFORTUNATELY, MONTGOMERY DID** not stay. He and General Morshead insisted that the Australians advance, rather than let the Germans come to them. Instead of fighting the Germans from dug-in positions, the soldiers were forced to venture out into the open desert landscape night after night as tanks and artillery pounded them from three sides. It was a bloodbath

**The advance took place at night to minimise losses from German machine-gun nests.**

– something for which Montgomery was heavily criticised after the war.

The strong German counter-attack in the north caused Montgomery to shift his attention south again, away from Rommel's panzer divisions. The Australians would continue to advance and now served as a diversionary tactic. In the same spirit, he allowed the 2nd Armoured Brigade, in cooperation with the Highlanders, to keep the battle at Kidney Ridge going. While the two battles sucked up the enemy's reserves, Montgomery wanted to follow Freyberg's advice and launch the decisive attack just south of Kidney Ridge. A well-coordinated infantry assault would finally punch a hole in the German-Italian lines. And when that was done, X Corps would

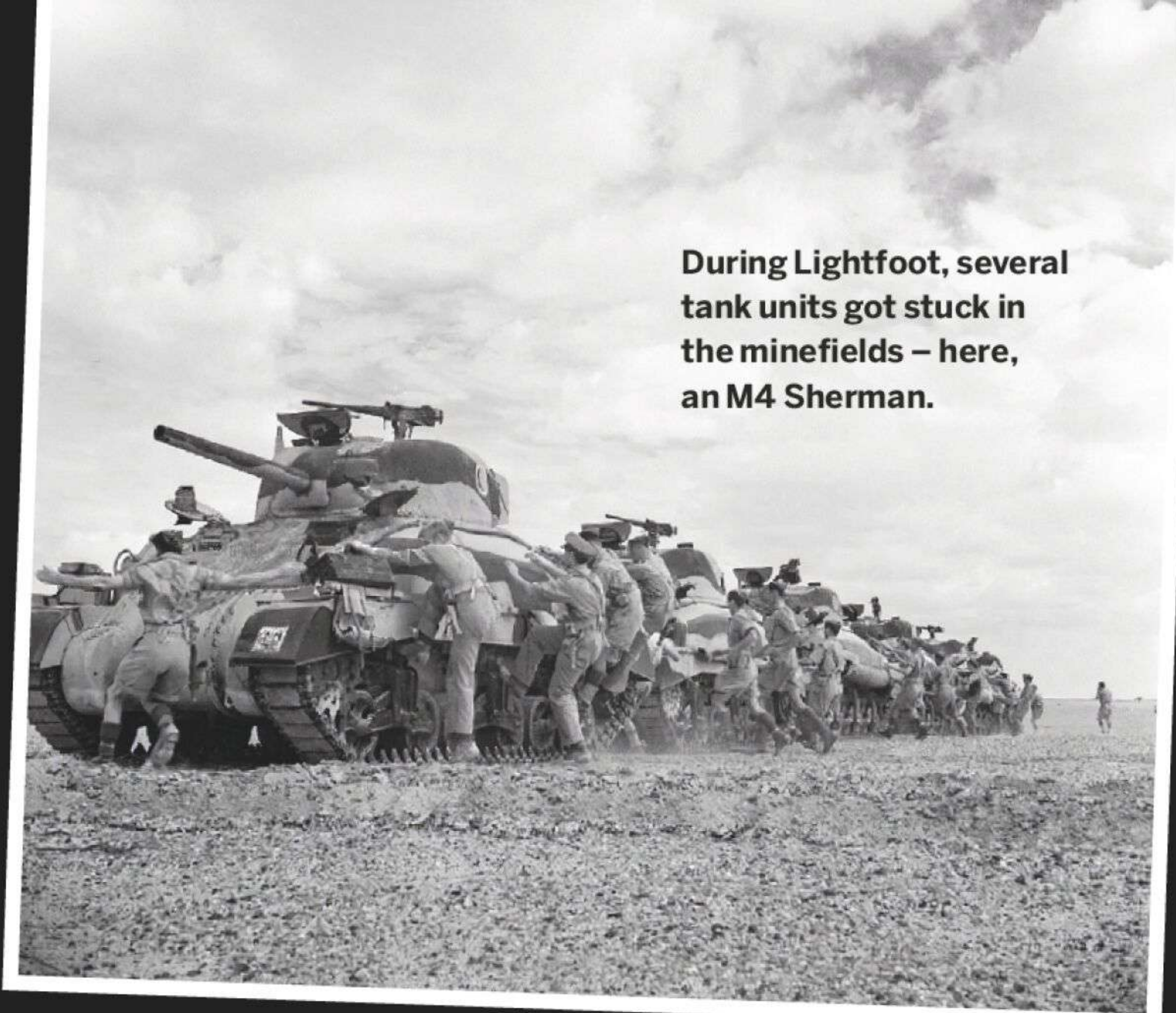


surely be able to engage in the manoeuvre warfare it had fantasised about.

To rally the reserve forces, the XXX Corps front line was reorganised and the 2nd New Zealand Division withdrawn. The division was not the best maintained in the army, but Montgomery trusted only Freyberg. They were supplied with new brigades of British and Highlanders, while the most battered New Zealand brigades were placed in reserve.

**WHILE FREYBERG ORGANISED** his division, Montgomery set about making plans for what he called Operation Supercharge. It was a more concentrated version of Lightfoot, adapted from the lessons learnt during its predecessor. With massive air and artillery support, and the 9th Armoured Brigade at its back – the only armoured unit Freyberg trusted – the 2nd Division was to move more than five kilometres through the heart of the German-Italian positions, almost to the Rahman Track.

This made the best use of the available reliable units. If Supercharge failed, there would be no more healthy infantry brigades left to deploy. Then the second battle of El Alamein would have to be abandoned like the first – with consequences for both army and imperial morale. But Montgomery did not



During Lightfoot, several tank units got stuck in the minefields – here, an M4 Sherman.

HISTORICARCHIVE

hesitate. In his memoirs, he wrote bluntly: “This was the master plan and only the master could write it.”

Operation Supercharge was scheduled for the night between 31st October and 1st November. But Freyberg asked to postpone the manoeuvre for 24 hours so he could prepare his new division. Montgomery reluctantly agreed. Only at 01.00 on 2nd November did 350 guns open fire simultaneously, announcing that the Battle of El Alamein was now in its final phase. Soon, the bagpipes of the ►

**“A WELL-COORDINATED INFANTRY ATTACK WOULD FINALLY PUNCH A HOLE IN THE GERMAN-ITALIAN LINES”**





# BATTLE OF EL ALAMEIN

- Highlanders and the battle cries of the Maori joined the spectacle, and the 2nd Division began its assault.

**IT WAS AN** attack across a narrow front, only two brigades wide (Lightfoot had been eight brigades wide), with just a few badly damaged brigades in reserve. The only thing that could prevent them from being cut off by a counter-attack was effective fire support from the artillery and DAF, and the fact that Rommel had no mobile units south of them.

Freyberg had drawn up a plan for the artillery. A creeping barrage swept away the enemy lines and prevented the defenders from taking up their positions before the Highlanders were upon them. The Highland Division was almost given a free pass to reach its goal. But the British brigade on the northern wing had to withstand several counter-attacks. Battered, it reached its destination at around 04.00.

A wedge had been driven into the German-Italian defence zones, and there was no sign that the enemy could do anything about it. Now it was the turn of the 9th Armoured Brigade to fight its way through the final stretch of the Rahman Track, Rommel's last line of defence.

Unlike the infantry, Brigadier Currie's troops had been dogged by bad luck from the start of the

## "THE BRITISH BRIGADE ON THE NORTH WING HAD TO WITHSTAND SEVERAL COUNTER-ATTACKS"

operation. During the march to the starting line, 40 tanks had been lost to unexploded mines. This left Currie with only 94 battleworthy tanks for the attack. Other Eighth Army armoured brigades would probably have seen the situation as unrealistic and taken up defensive positions, but Currie was determined to carry out the task. He asked Freyberg for an extra 30 minutes before the attack began – to organise his tanks. Freyberg agreed, which he would come to regret. During that half hour, the sky behind the 9th Brigade brightened, making their tanks easier targets for the dreaded 88-mm guns along the Rahman Track.

The attack began painlessly while it was still dark. But as dawn broke, the casualty figures grew. One whole regiment was almost wiped out, and the other two were battered. Once the sun had risen, Currie looked out over a sea of burning tanks, with a few islands of serviceable vehicles embroiled in fierce battles against German guns. He had tripped at the finish line – only a handful of tanks had managed to cross the Rahman Track. Now the brigade was exhausted, and all Currie could do was keep the gap open for X Corps to flow through.

**AT 07.00, THE** 1st Armoured Division's spearhead reached Currie's forward command post. Currie urged Colonel Grosvenor to exploit the gap that the 9th Brigade had created. Grosvenor glanced at the burning tanks and said: "I have never seen anything, sir, that looked less like a gap!"

To Currie's dismay, Grosvenor entrenched his tanks and refused to proceed. The decision was quickly confirmed by both his brigade and divisional commander, despite the objections of Freyberg and Montgomery.

Churchill's decision not to purge the Eighth Army's officer corps nearly cost him the victory he craved. He could only thank Rommel for the fact that the battle did not end in a stalemate.

Seeing his last line of defence broken, Rommel realised that he would have taken advantage of a similar situation to roll up the enemy flank, so he felt compelled to drive the British back. He scraped together his last tanks, gave them permission to use up their remaining fuel and threw them at the hole in the lines. It was a mistake on the Desert Fox's part, because it gave the British 1st Armoured Division the opportunity to do what it did best: hold a defensive position. And it gave ►

**A tank mine detonates next to advancing British vehicles.**



IMPERIAL WAR MUSEUM



# Final British strike

★ Montgomery hoped that Operation Supercharge would be the coup de grâce for Rommel's weakened forces. Rommel realised that defeat was inevitable and ordered a retreat. The remnants of the German-Italian Army were then chased by the Eighth Army all the way to Tunisia.

Operation Supercharge  
2nd–4th November 1942

Front line 2nd Nov

Front line 4th Nov

British attacks

German retreats

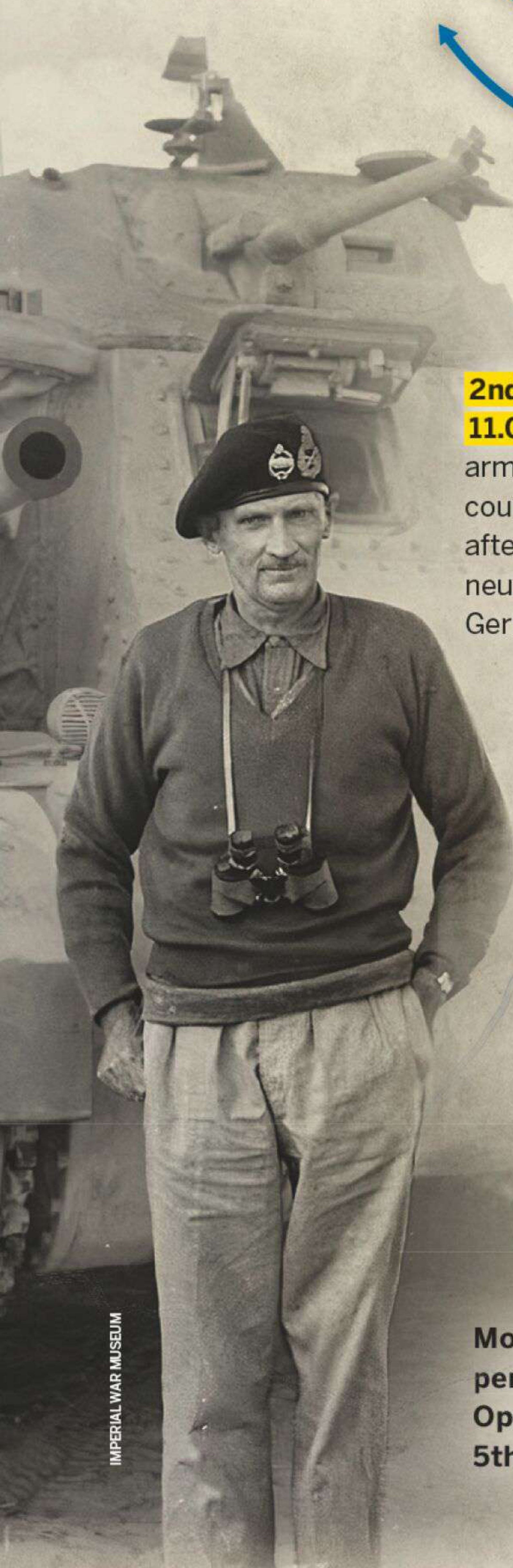
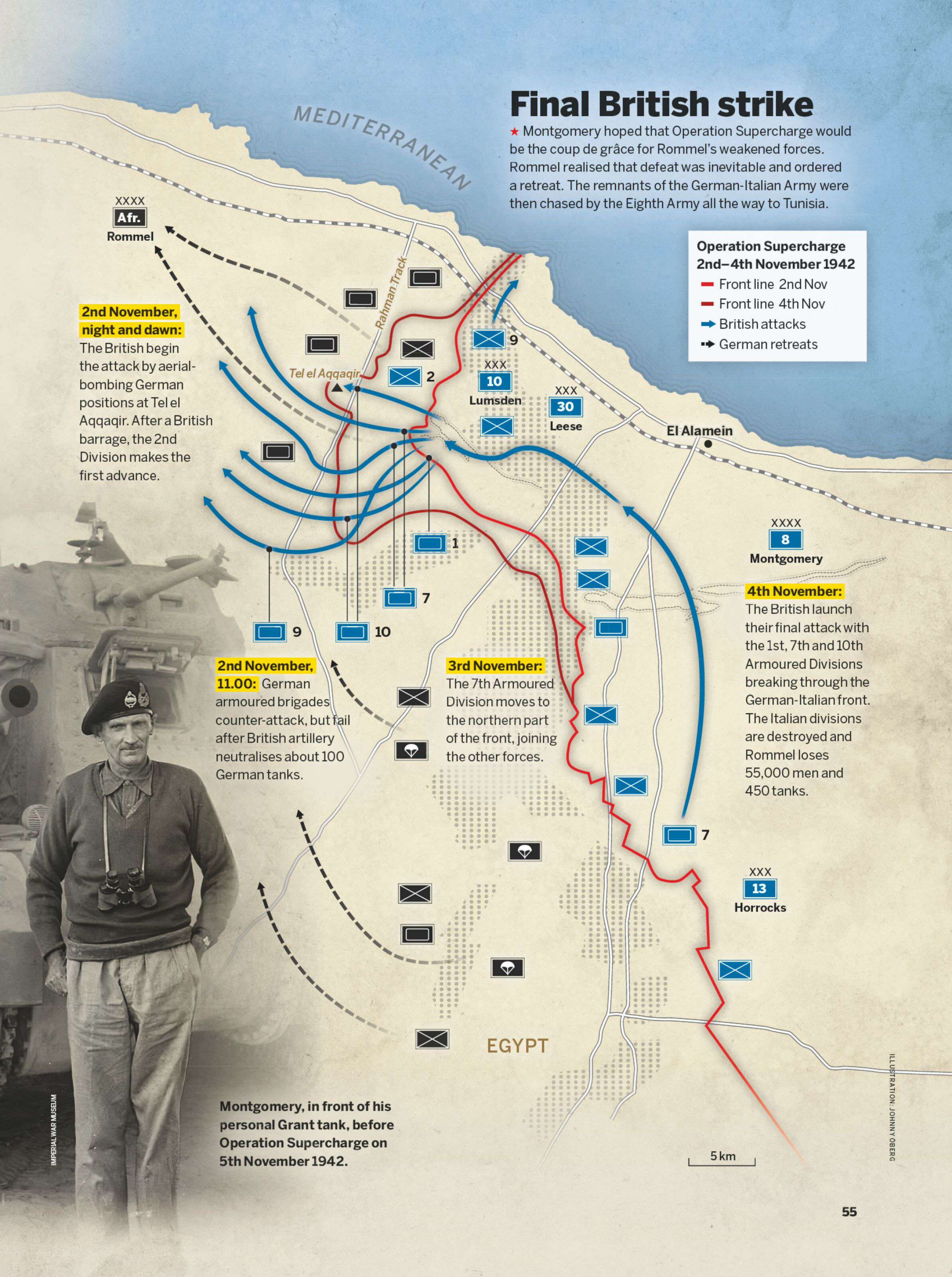
**2nd November, night and dawn:**  
The British begin the attack by aerial-bombing German positions at Tel el Aqqaqir. After a British barrage, the 2nd Division makes the first advance.

**2nd November, 11.00:** German armoured brigades counter-attack, but fail after British artillery neutralises about 100 German tanks.

**3rd November:**  
The 7th Armoured Division moves to the northern part of the front, joining the other forces.

**4th November:**  
The British launch their final attack with the 1st, 7th and 10th Armoured Divisions breaking through the German-Italian front. The Italian divisions are destroyed and Rommel loses 55,000 men and 450 tanks.

Montgomery, in front of his personal Grant tank, before Operation Supercharge on 5th November 1942.





# BATTLE OF EL ALAMEIN

- ▶ Montgomery the armoured unit showdown that he had wanted.

The ensuing battle at 11.00 on 2nd November, sometimes referred to as the Battle of Tel el Aqqaqir, was the climax of the Battle of El Alamein. The 1st Armoured Division held its ground with support from artillery and the DAF. Rommel had thrown his last armoured forces into a meat grinder, and after a few hours, he had only 35 usable tanks left.

**ON THE EVENING** of 2nd November, Rommel requested permission to abandon the position. Expecting a favourable response, he began a withdrawal before Berlin had responded. But Hitler, in characteristic fashion, demanded that El Alamein be held to the last man and the last bullet. Rommel was forced to abort the retreat, realising that the Führer had decided to sacrifice an exhausted but capable and experienced army.

Frustrated that the enemy was clinging on and that X Corps was still refusing orders, it was Montgomery's turn to rush in. He pushed infantry divisions forward in poorly coordinated attacks,

reminiscent of the situation at the end of July. He achieved nothing more than further wearing out his men.

On the morning of 4th November, the 7th Armoured Division – the famous Desert Rats – finally managed to break through the gap in the German-Italian line. Now X Corps could finally advance, and spirits were high. It was a nightmare scenario for Rommel – enemy armoured forces could stab him in the back.

He decided to ignore his orders and called for a resumption of the retreat, which was later authorised higher up. Rommel also sacrificed the sad remains of his three Italian armoured divisions to hold off the British 7th Armoured Division long enough to rescue the veterans of the Afrika Korps and infantry from the battlefield.

The Battle of El Alamein was over. Rommel's forces had not been completely destroyed, as Montgomery had hoped, but that didn't matter. He did not want to waste the victory, so he took up pursuit with the utmost caution. Each time Montgomery reached new lines of defence





established by Rommel, he paused and built up his forces for a breakthrough attempt instead of trying to surround the enemy.

On this point, too, Montgomery has been criticised. But given how often the desert army's hubris had cost it dearly, and how little confidence X Corps had, his caution was not unreasonable. No more cavalry charges across the dunes in search of a defeated enemy. Montgomery's Eighth Army was a glacier, slow but unstoppable. Since Rommel could not lure Montgomery into a trap, he had no choice but to fall back from defence line to defence line all the way to Tunisia.

**IN DOING SO**, it meant Montgomery had achieved what he had set out to do, and had decisively turned the tide in North Africa. It was not elegant, but it was risk-free.

But was it necessary? After the war, some writers, such as Correlli Barnett, condemned the battle as pointless bloodshed. The Allied landing in Morocco a few weeks later made Axis control of North Africa impossible and would have eventually

forced Rommel to withdraw from Egypt. Nor did the battle help secure Suez and the oil wells of the Middle East, because Rommel had lost his chance to break through at El Alamein in July when he was stopped by Auchinleck. So, what had Montgomery achieved by sacrificing the lives of so many British soldiers?

Here we should return to the psychological factor. El Alamein was the great turning point of the war for Britain's morale, just as the Battle of Stalingrad was for the Soviet Union. As Churchill (not quite correctly) put it: "Before Alamein we never had a victory. After Alamein we never had a defeat." Montgomery restored the British Army's faith in itself – a faith without which it would have been difficult to see British troops land in Italy and France.

The victory at El Alamein enabled Britain to remain an (almost) equal partner in the war, and have a say in Europe's post-war fate. ★

**Rasmus Kjaerbye Petersen** is a writer on military history.



**British soldiers, hot on the heels of the Afrika Korps' retreat in November 1942.**

MONDADORI/GETTY



An M3 Lee tank from the US 1st Armored Division advances to support US forces during the Battle of Kasserine Pass.

WII SIGNAL CORPS PHOTOGRAPH COLLECTION





**Kasserine Pass 1943**

# **US FACED DESERT BAPTISM OF FIRE**

**It was in North Africa that the United States entered the war against Germany. Despite initial success, the operation was beset by serious leadership issues, which almost cost the Allies victory in the important Battle of Kasserine Pass.**

**Text: TORBJÖRN KVIST**





# BATTLE OF KASSERINE PASS

**D**uring the spring and summer of 1942, Britain persuaded the US to abandon the idea of a direct invasion of the European mainland. Instead of Operation Sledgehammer – a landing in northern France – the Americans agreed to what was seen as a detour: Operation Torch, landing in Morocco and Algeria to open a second front in North Africa. The aim was to destroy the German Afrika Korps and gather strength for the move into Europe.

Operation Torch began on 8th November 1942, just days after the British victory at El Alamein, over 3,000 kilometres to the east. The landing marked the introduction of the mighty US military to the war against Germany, and the first step in its campaign towards Berlin. Torch was mainly a US operation; from Casablanca in the west to Algiers in the east, it was only later on that British forces participated. Algeria and Morocco – French colonies under the pro-German Vichy regime – put up only sporadic resistance, and Allied troops were able to advance relatively easily through the Atlas Mountains into Tunisia. At the end of January, the German and Italian Afrika Korps gathered in the eastern part of Tunisia, sandwiched between US troops from Operation Torch in the west and General Montgomery's British Eighth Army from El Alamein in the south. With a two-front war imminent, the Atlas Mountains came under the spotlight. Forming a natural defence around

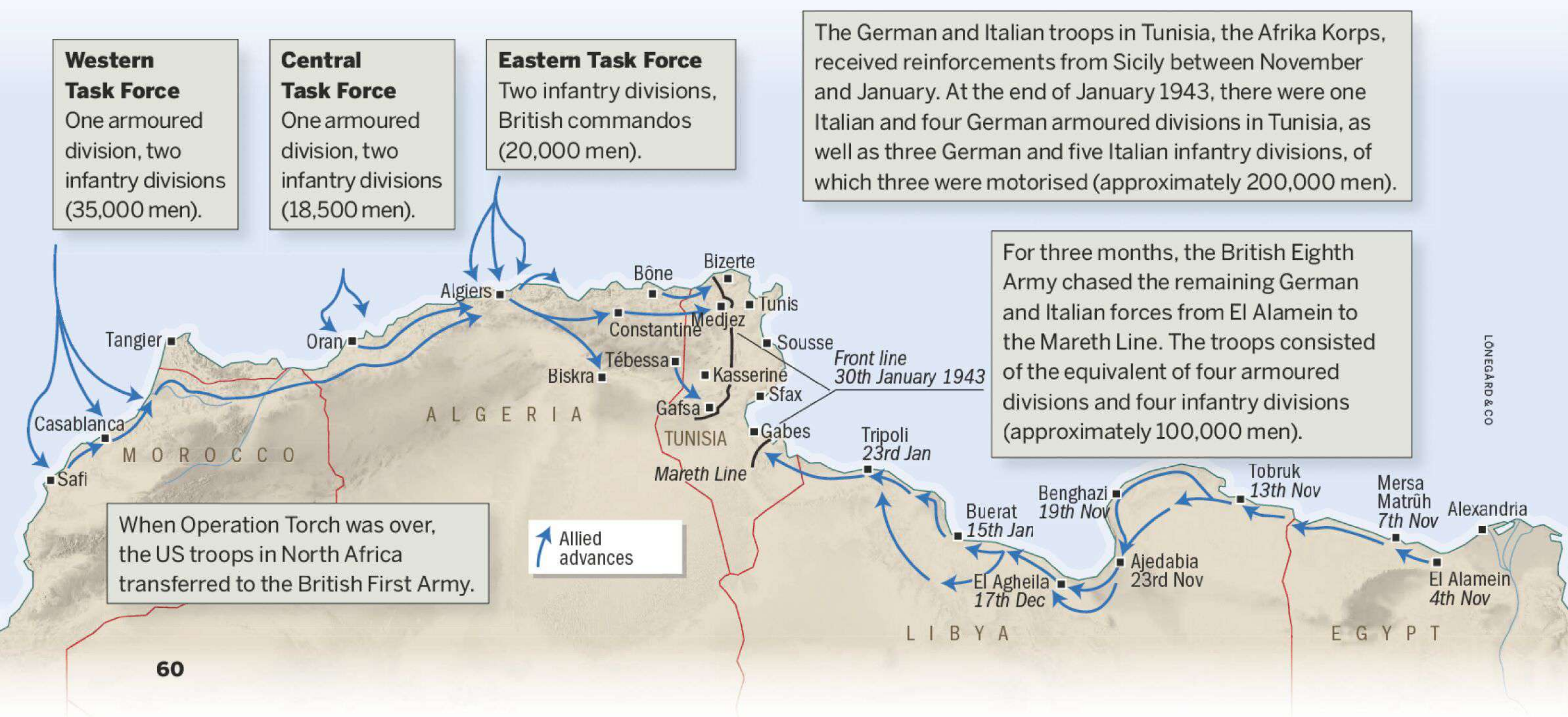
Tunisia, the inferior German and Italian troops now had something resembling a fortress to which they could turn.

However, the Germans were concerned. The Allies had already taken a prominent position at the foot of the Aures Mountains near the village of Faid, in central Tunisia. Field Marshal Kesselring requested a strategy from Rommel to repel the Allied forces in the west, back through the three-kilometre-wide Kasserine Pass.

**II CORPS WAS** the first combatant US Army unit in the Afro-European region. It had formed the Central Task Force in Oran during Operation Torch, but was now part of the British First Army, which was assembled in northern Algeria, together with two British and one French army corps. The US corps was poorly organised during the last days of January 1943 and spread all over the place. It consisted of the 1st Infantry Division (known as the Big Red One) and the 9th Infantry Division, as well as the 1st Armored Division. Its commander was Major General Lloyd Fredendall, a career officer from Wyoming, who was dismissed from West Point twice and instead received his commission through reserve officer training at the Massachusetts Institute of Technology (MIT). He was a short, energetic man, who put on a tough persona to the outside world.

Perhaps it was his cockiness that appealed to the US Army chief of staff, General George Marshall, when he gave Fredendall command of

## Operation Torch, 8th–16th November 1942





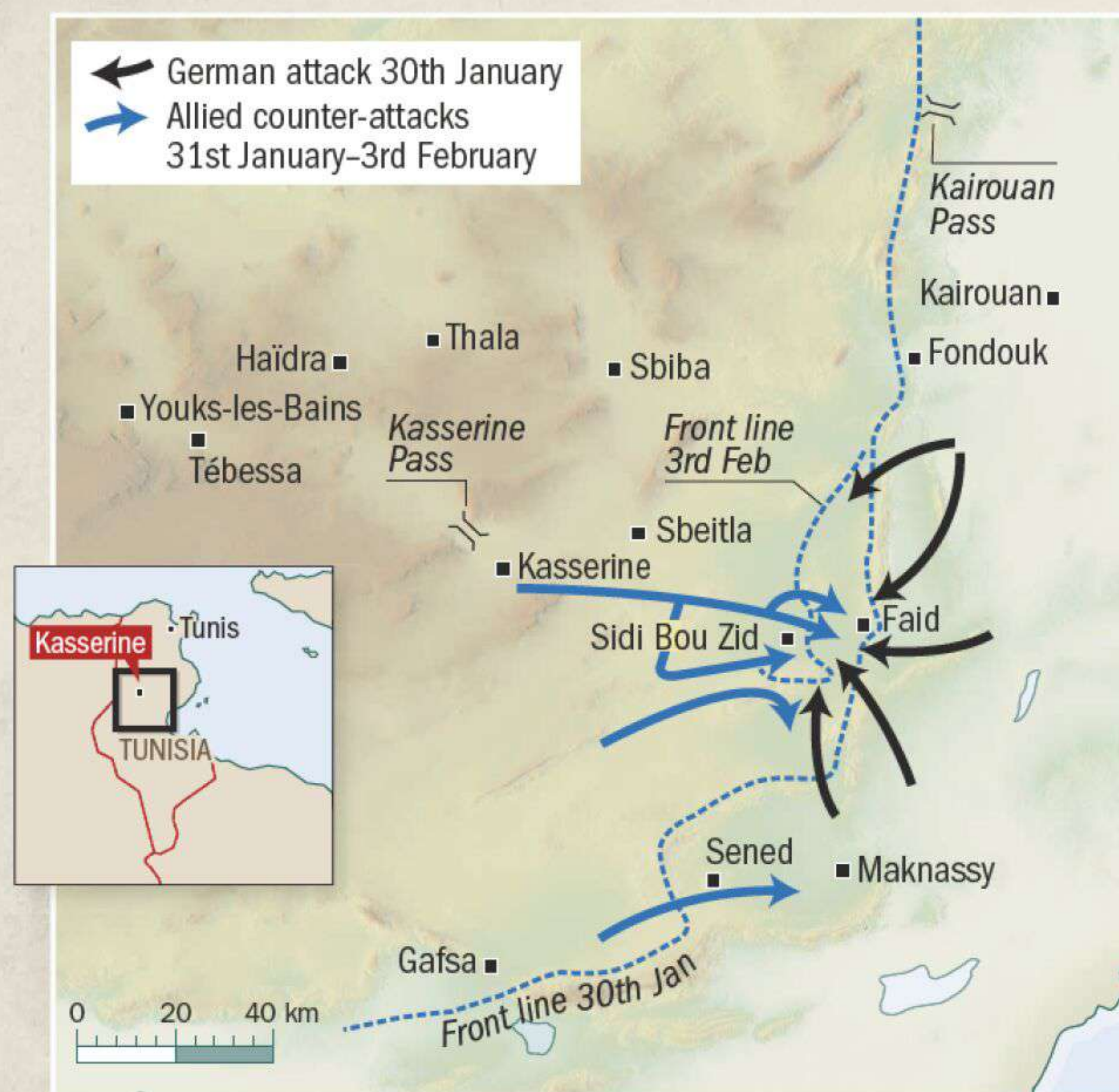
## “IN THE MIDDLE OF THE INSPECTION, THE GERMANS LAUNCHED A RENEWED ATTACK”

the Central Task Force, and then his first battle command, II Corps. His immediate superior, British Lieutenant-General Kenneth Anderson, regarded him as incompetent from the outset. Fredendall lacked any combat experience and despite appearances, preferred to stay at sea on his staffship during Operation Torch. Once ashore, he had a large command bunker built 15 kilometres outside the city of Tébessa in Algeria, almost 100 kilometres behind an imaginary front line on the other side of the Kasserine Pass.

**IT WAS THE** Germans who took the initiative. The fighting began on 30th January, when units from the 21st Panzer Division of the German 5th Panzer Army under Colonel-General Hans-Jürgen von Arnim advanced on the Allied positions at Faid. They immediately met fierce resistance from the well-aimed crossfire of US and French artillery. The Germans suffered numerous losses and retreated to their starting position. Major General Orlando Ward, head of the US 1st Armored Division, commanded an advance aimed at attacking the fleeing German units. However, General Ward failed to consult with the more experienced British about German panzer tactics. Soon the US tanks were surrounded by the dreaded German 88-mm anti-tank guns. Every tank was hit and the Germans were able to attack once again. The US infantry were unable to escape and their use of weapons seemed almost amateur. The German tank crews were easily able to overcome the hapless US troops.

At the turn of the month, January-February 1943, the Germans had recaptured virtually all of Tunisia and effectively closed the mouth of the Kasserine Pass at Faid. Rommel then ordered a halt and began a two-week discussion with his subordinates about what to do next. It was a tense situation – they were between two enemy armies and the outcome was uncertain. One thing Rommel had learned, however, was that the US Army posed a smaller threat than anticipated. He was sure of that.

Little was done to improve the situation. Communications had broken down, and General Fredendall sat in his bunker 100 kilometres away, not even bothering to visit the shocked troops in the Tunisian mountains. He also had a careless way of expressing himself, even during battle. Instead ▶



## The battles at Faid

★ After Operation Torch and the Allied advances, US units held a front along the south-eastern edge of the Atlas Mountains. However, the passes at Maknassy, Fondouk and Kairouan, which faced the Tunisian plains and the coast, were still in German hands.

On 30th January, German units from the 21st Panzer Division attacked the US forces holding the Faid Pass. It was important for the Germans to regain this, as a US attack east of the coast threatened to cut off Rommel's forces in southern Tunisia. After several days of unsuccessful counter-attacks by its 1st Armored Division, the US decided to retreat and withdrew to an area near Sidi Bou Zid. After less than a week, the heavy fighting ceased and the German troops stopped to wait for new orders from headquarters in Italy.

In the south, units from the US 1st Armored Division made an attempt on 3rd February to reach Maknassy but were repulsed by units from the German Afrika Korps.



Commander of US Army II Corps, General Fredendall, was quickly replaced when the fighting at Kasserine Pass began.



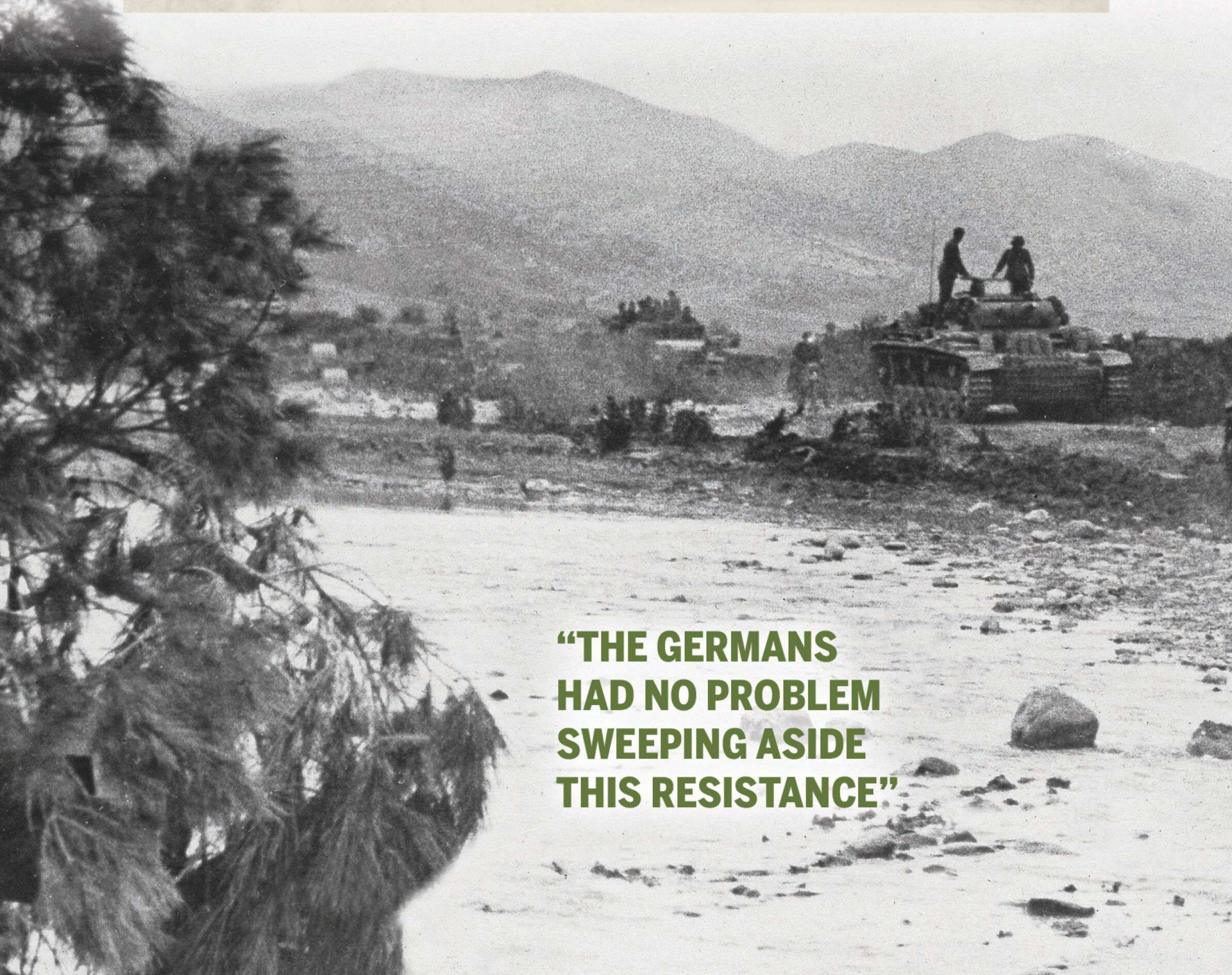
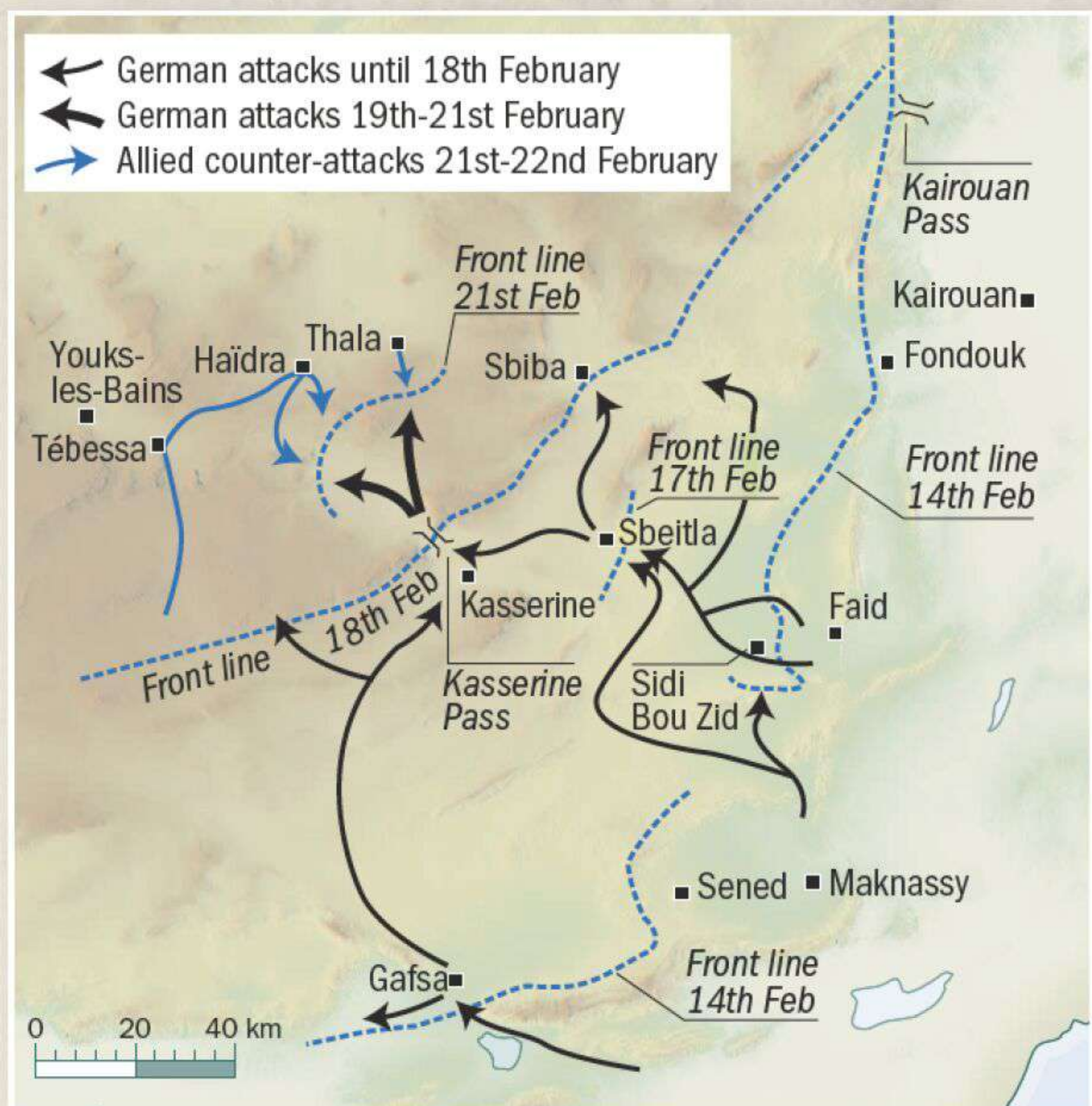
# BATTLE OF KASSERINE PASS

## Kasserine Pass

★ After two weeks of waiting, the German 10th and 21st Panzer Divisions finally launched their offensive at Sidi Bou Zid on 14th February 1943, while pushing back into Sbeitla. After Sbeitla was recaptured, the 21st Division continued north towards Sbiba, while the 10th Division went towards Kasserine. In the south, the German Afrika Korps attacked Gafsa and continued north.

On 19th February, the Germans broke through the Kasserine Pass and one group continued north

towards Thala while another carried on towards Haidra. The situation for the Allies was critical until a British-US force at Thala was able to defeat the Germans' offensive. At Haidra, the Germans were stopped by a group from the US 1st Armored Division. The Germans' attacks were also halted at Sbiba. After artillery fire and air strikes inflicted heavy losses on the Germans, they began to retreat on 22nd February. On the 25th, the Kasserine Pass was again in Allied hands.



**“THE GERMANS  
HAD NO PROBLEM  
SWEEPING ASIDE  
THIS RESISTANCE”**



► of sticking to standard commands, he spoke in slang and confusing codes that couldn't be understood by either his staff or the troops.

**FREDENDALL AND THE** head of the 1st Armored Division, General Ward, had already developed a deep mutual resentment, and now they refused to even talk to each other. But Fredendall's superior, Lieutenant-General Anderson, was also part of the problem. His troops, scattered along a 320-kilometre-long front on the northern side of the Atlas Mountains, had not trained together, and language and procedural differences were a constant issue.

Anderson had ignored the varying combat strengths of his men – the British were experienced but there were too few of them, the Americans were well equipped but inexperienced, and the French were a poorly equipped colonial force. There was also a lack of credible air defence. With Malta as virtually their only available air base, the Allies found it difficult to act on a tactical level, and the Luftwaffe was able to temporarily gain air

supremacy over Tunisia with numerically inferior air forces.

**ON 14TH FEBRUARY,** the US 1st Armored Division and the Big Red One Infantry were still in disarray, grouped at Sidi Bou Zid, 16 kilometres west of Faïd, on a plateau inside the mouth of the Kasserine Pass. There they were attacked by units from the German 10th and 21st Panzer Divisions, both borrowed from von Arnim's 5th Panzer Army, and under the command of the Desert Fox, Field Marshal Rommel, himself.

The US troops never managed to marshal themselves for the battle. Their infantry was grouped at three different levels without the ability to support each other and lacking help from either tanks or artillery. The Germans had no problem sweeping aside this resistance, and the US withdrew into the pass after the first day.

It was a disaster – II Corps had so far lost 2,500 men, wounded or dead, over 100 tanks and almost 300 transport vehicles. The recently appointed ►

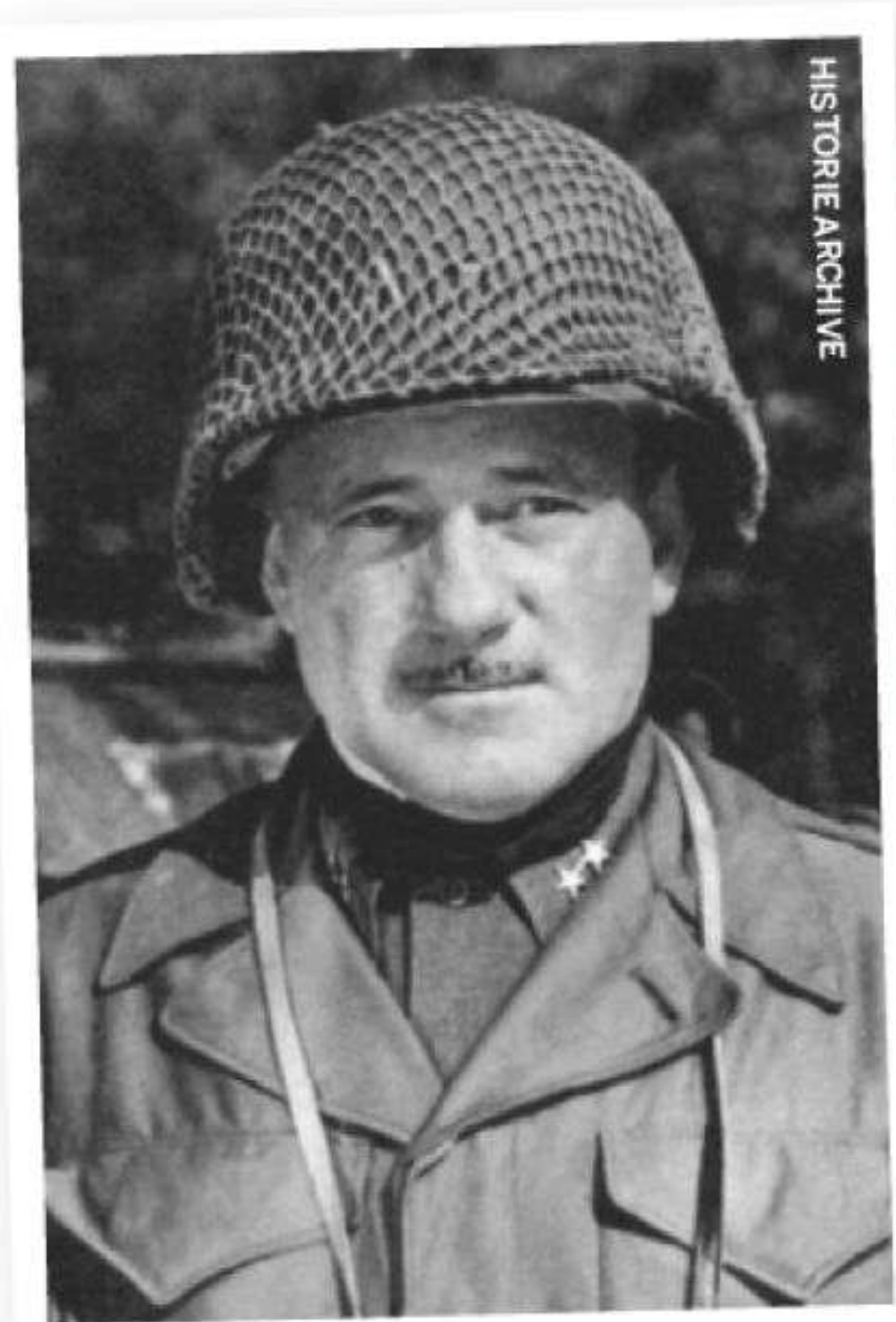
**German tanks advance. The newly arrived US units were unprepared for the German attack, resulting in their chaotic retreat to the Kasserine Pass.**





# BATTLE OF KASSERINE PASS

► Commander-in-Chief of Allied Forces in North Africa and Europe, General Dwight D Eisenhower – who personally visited General Fredendall’s bunker at Tébessa – decided to send a trusted friend and proven warhorse to the Kasserine Pass, Major General Ernest N Harmon, former head of the 2nd Armored Division in Algiers. General Harmon’s reports formed the basis of the devastating criticism levelled at General Fredendall. Harmon was appalled at the low morale of the US units. He also received information from chiefs of staff and divisions that Fredendall seemed out of touch, ensconced in his bunker, and had also been intoxicated. Harmon felt that General Anderson’s growing contempt for the ‘Yanks’ had also actively contributed to the deplorable position of the US corps, putting pressure on the commanders, who were now trying to sort out the situation. In the middle of the inspection, the Germans launched a renewed attack along the Kasserine Pass against the terrified US troops.



**General Ernest Harmon took command of US troops in the Kasserine Pass.**

**ON 19TH FEBRUARY,** Rommel received the go-ahead from *Comando Supremo* (supreme command) in Rome for his plan for the Kasserine Pass. However, the strategy had been revised and Rommel had a hard time hiding his anger. The reason for the setback was the lack of a clear goal, the fact that the legendary general had been slow to act against

the Allies in the west, and that in the shadow of the threat to the Mareth Line in the south, Rommel had described the operation at Kasserine mostly as a means of plundering the abundant US depots.

Rommel had based his argument on the needs of the troops. The Germans, like the Italians, suffered from a shortage of everything, and throughout the remaining Tunisian campaign, his Afrika Korps came to appreciate the value of US equipment, especially vehicles. Rommel had intended to take the Kasserine Pass and the great garrison in Tébessa, severely damage the eastern flank of the British First Army, and establish a vital air base in Youks-les-Bains, west of Tébessa – probably where General Fredendall’s bunker lay. With the revised plan, he didn’t have enough units to capture and keep the terrain; it instead became more of a clean-up operation.

Units from the German 10th Panzer Division launched a new advance in a north-westerly direction, into the Kasserine Pass, on 20th February. The units went under the collective name Division von Broich, after their commander Friedrich von Broich, a highly competent panzer officer who had been promoted from colonel to major general only five days earlier. There were also Italian units in the attacking force, skilfully trained by the Germans


and now with a markedly high combat value. It was therefore no problem for the 7th *Bersaglieri* (Sharpshooter) Regiment to break through the US lines in a few minutes. The inferior US Lee and Stuart tanks from the 1st Armored Division stood no chance against the Germans’ Panzer IV and new Panzer VI Tiger. US unit commanders constantly called for artillery support, which came too late, as the troops had already been forced to withdraw.

The battle became a pursuit of the confused US troops. Rommel divided von Broich’s units into two spearheads, each following a path out of the pass to the north-west. The northern force attacked Thala, while the southern force advanced on Haidra. Morale began to break down among the US soldiers; without decisive leadership, they no longer retreated – it was more of a disorderly escape. The Kasserine Pass was completely open on the night of 21st February and Tébessa was within the Germans’ reach. General Fredendall’s troops considered splitting up and fleeing.

**GENERAL KENNETH ANDERSON** saved the US units. He sent as many troops as he could to the resulting gap. He threw in the 9th Infantry Division, whose entire artillery – 50 guns – had been driven 1,300 kilometres from Morocco. At this point, General Harmon entered the fray. At Thala, he joined a British command, code-named Nick Force, under Brigadier General Cameron Nicholson. Harmon over-ruled General Anderson’s order to group the newly arrived US artillery further back at Le Kef. Instead, he ordered the artillery to stay in Thala and fight with the British. Under pressure from General Eisenhower, Anderson and Fredendall were forced to accept Harmon’s command in the Kasserine Pass, because neither had any intention of going to the front themselves.

On the morning of 22nd February, the Allies were able, with intense artillery support, to repel further German attacks on the Thala–Haidra line. The German units lacked any additional offensive power, while the US troops used their best resource – field artillery. The heavy shelling forced the Germans to wait until dark before they could withdraw their front units. At the same time, the psychological effect of the two-front war began to make itself felt and Rommel realised that his limited units faced a catastrophe if the British, under Montgomery, attacked Mareth in the south. He therefore ordered a general retreat from the Kasserine Pass. The following day, Allied attack planes arrived in force and the Germans rushed to withdraw. On 25th February, the Kasserine Pass was again in the hands of the Allies. Their losses amounted to 10,000 men (of which 6,500 were Americans), 180 tanks and as many as 700





Using their artillery, the Americans finally managed to stop the German offensive. Here a 105-mm howitzer.

trucks. The Germans lost 2,000 in dead and wounded, as well as about 30 tanks.

**BY THIS TIME,** Eisenhower had begun work on organising the new 18th Army Group under British General Harold Alexander. The evaluation of the Battle of Kasserine Pass came to be an important factor in that context, especially for the US, which was preparing to establish its new Seventh Army in North Africa. The substandard communications, lack of air supremacy, poor fieldwork and lack of leadership were all noted. Lieutenant General Kenneth Anderson was allowed to remain in his role for the time being, because Montgomery refused to release his best corps commander, Oliver Leese, to become the new leader of the First Army. However, US General Omar N Bradley arrived at the Kasserine Pass even before the Germans had been driven out. He confirmed Harmon's reports of Fredendall's lack of leadership during the fighting. What Bradley described was a careless army corps that had lost its purpose and strength. Washington acted and Fredendall began packing his bags in his bunker for the trip home. He never led troops into battle again.

General Bradley tried to take credit for the decisive course of events that now took place, claiming that it

## “ROMMEL REALISED THAT HIS LIMITED UNITS FACED A CATASTROPHE IF THE BRITISH ATTACKED MARETH”

was on his advice that Eisenhower looked around for a new commander of the US Army II Corps among the United States' top generals. In reality, Omar Bradley stood aside for a commander whom Eisenhower obviously saw as the only possible choice.

And so exactly as legend recorded it, with sirens wailing from his open truck and standing in the back like a Roman centurion, newly appointed Lieutenant General George S Patton Jr arrived from Casablanca on 6th March 1943, and the US Army would never be the same again. Patton took the US Army II Corps by storm. A major shakeup and tough discipline was introduced, and less than two weeks later, the revitalised corps defeated the Germans at El Guettar, never to lose again. 🇺🇸

**Torbjörn Kvist** is a freelance writer.



**“SOUTHERLY WINDS  
BLASTED SAND INTO  
THE SKIN, PIERCING IT  
LIKE NEEDLES”**

A radio-equipped Chevrolet WB truck from the Long Range Desert Group. In the passenger seat is a Lewis machine gun and, on the bed of the truck, a Boys anti-tank rifle. March 1941.





# Long Range Desert Group

# DESERT WAR

# MASTERS



The LRDG was given licence to roam freely in its specially equipped vehicles, wreaking havoc behind enemy lines in the Libyan desert. This British special force was founded by Major Ralph Bagnold, a pioneer of desert exploration.

Text: **KARL-GUNNAR NORÉN**

**W**ithin the space of just a few weeks, the first three patrols of the Long Range Patrol (LRP) unit were ready. This nomadic British desert unit would soon take on the legendary name it's known by today – Long Range Desert Group (LRDG) – but in the meantime, men were quickly recruited, and vehicles and equipment adapted to the unique desert conditions. Soon, two depots were established, one at Ain Dalla, near the edge of the Great Sand Sea in the Sahara Desert, the other at Siwa Oasis. There, the new patrols would be able to fill up with petrol and water before trekking across the Libyan Desert.

The new units spent their time training for upcoming missions, mapping the terrain and setting up multiple stores for fuel, food and water along the Libyan border. They also used the 'underground' back road that led from Ain Dalla to enter Libya and covertly reconnoitre locations around the Kufra Oasis, and occasionally to loot and destroy enemy supplies and equipment in the Mount Uwaynat mountains on the border with Sudan. By



**Ralph Bagnold.**

September 1940, the first three patrols were ready for action.

**ON THE MORNING** of 5th September, W Patrol travelled to Ain Dalla at the border with the Great Sand Sea. It reached the road between the Jalo and Kufra oases 11 days later without drawing unwelcome attention from the Italian army. The road had recently been used and it was possible to detect both the direction and frequency of enemy traffic by the wheel tracks in the sand. At this point, W patrol was exposed to the Ghibli desert wind. These southerly winds blasted sand into the skin, piercing it like needles, while making it difficult to eat. There was also 50°C heat to contend with, which according to patrol member Lieutenant William Boyd Kennedy Shaw, made it feel like "your brain was thrusting its way through the top of your head".

On the same day, the patrol came across two of the enemy's emergency landing grounds along the Jalo-Kufra flight path. They destroyed the petrol pumps, fuel tanks and a wind gauge at the first, then followed the trail to the next one and set



**Patrols had to cross The Great Sand Sea to enter Libya.**



# LONG RANGE DESERT GROUP

► approximately 500 litres of jet fuel alight. And still no Italians were in sight.

Four days later, the patrol met two Italian lorries that constituted the fortnightly convoy to Kufra, where they entered combat for the first time. A single burst of machine gun fire over both vehicles was enough to both start and end the hostilities. The patrol collected its first prisoners: two civilian Italian drivers, two Arab guides, three Arab passengers and a goat. For Kennedy Shaw, the booty was more interesting: “2,500 gallons of petrol, a nice line in cheap haberdashery and, best of all, the bag of official mail”. The letters, along with the information gleaned by interrogating the prisoners, was proudly handed over to British Army headquarters in Cairo.

**ITALY HAD CONTROLLED** Libya since 1912 and had 250,000 soldiers stationed there. In 1936, Mussolini had attacked and occupied Abyssinia (now Ethiopia), and his ambition was to extend Italian control across the southern Mediterranean – often at the expense of British interests. When Italy’s ally,

**Road surveillance and raids on Italian transport convoys were common for the patrols. Thick coats and hats protected them from the cold in the desert night.**



**Bagnold's sun compass.**

Germany, went to war with Britain, the situation in Allied-controlled Egypt became critical.

British officer Ralph Bagnold realised that the Italian presence in Libya presented a deadly threat to the British protectorate in Egypt. The stretch of land from Mount Uweynat on the Egyptian-Libya border to the key Aswan Dam inside Egypt was almost 1,300 km long and as flat as a pancake. The Italians possessed desert forces that could cross the area in a few days, but neither the Egyptians nor the British were prepared to do anything before any capture of the dam became fact.

**BEFORE ITALY'S DECLARATION** of war, Bagnold had already proposed a mobile, scouting force that could provide reconnaissance of the Libyan desert and prepare for an attack on the Italians if the threat became serious. It was a proposal rejected by British headquarters in Cairo because commanders there thought it would provoke Mussolini.

Bagnold's suggestion of taking motorised patrols across the 300-kilometre-wide Great Sand Sea was also considered pure madness. Perhaps Bagnold





## Trucks and machine guns

★ Each patrol comprised two officers and 25 NCOs or privates who travelled in ten 30-cwt Chevrolets, specially equipped for 21 days and 1,770 km of independent operation. The patrols were led by a small mobile staff in a 15-cwt Ford Pilot.

Initially, the vehicles were equipped with Lewis machine guns from World War I and Boys anti-tank rifles, but later they

received more modern Vickers and Browning machine guns.

Officers and crew were recruited first from a New Zealand division in the Middle East and later with volunteers from Southern Rhodesia (now Zimbabwe), the British Scots and Coldstream Guards, plus the Yeomanry Cavalry.

was crazy, just like his boss, Percy Hobart, a man whom HQ had deemed a fool because he dreamed of replacing the cavalry forces' horses with tanks. Hobart was fired, but his Hobart's Funnies – modified tanks – went on to play a role in the D-Day landings in 1944. Bagnold refused to be deterred, however, and soon proposed the motorised patrol scheme once more – this time, however, it was taken seriously and quickly actioned.

When General Archibald Wavell was made general officer commanding-in-chief (GOC-in-C) of Middle East Command in Egypt in July 1939, he understood the urgent need for a reconnaissance-and-deep-penetration force along the lines that Bagnold had proposed; it was surely just a matter of time before General Rodolfo Graziani's 15 Italian divisions in Libya rolled across the border towards the Nile, Cairo and the Suez Canal. Newly appointed Major Bagnold was given a free hand and six weeks to kick-start the Long Range Patrol.

**BAGNOLD HAD BEEN** a professional military man from a young age, and like many others had spent several years in the trenches on the Western Front during World War I. After the war, he was posted as a liaison officer in Egypt, where he met motor enthusiasts like himself among the younger officers. Instead of participating in Cairo's nightlife, they preferred adventurous excursions to the desert.

They took off – in primitive Ford Model Ts – on their own small expeditions to the Sinai Desert, Palestine and Jordan. Bagnold was the primary force behind these pioneering treks.

Bagnold rejected – with good reason – the army's own vehicles. They were too high and difficult to camouflage, plus they couldn't handle the desert terrain. Four-wheel drive vehicles were also dismissed due to excessive fuel consumption, which would reduce their operating range. Instead, Bagnold

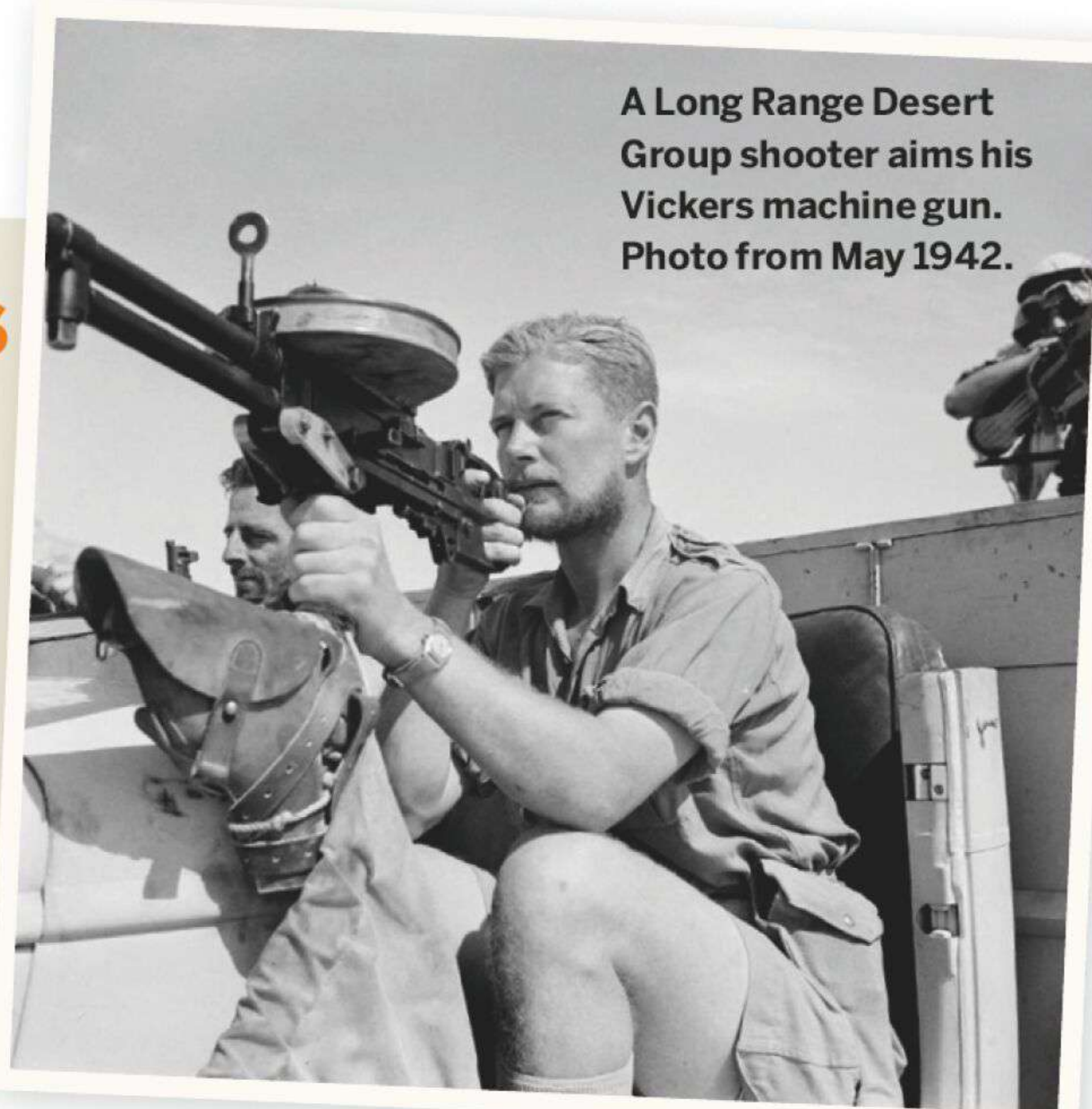
purchased Chevrolet WB 30-cwt civilian trucks from a local dealer and borrowed some more from the Egyptian army. Altogether, there were 33 Chevrolet 30-cwt and four Chevrolet 15-cwt command vehicles.

In the army workshops, Bagnold's sketches – based on his experiences during his private desert expeditions in the mid-1920s – were used to modify the new unit's vehicles. Each kilogram shed increased a vehicle's effective operating range. Roofs and car windows were cut out since they added unnecessary weight, particularly as 360-degree visibility was needed, both to detect enemy aircraft and also to accommodate mounts for the machine guns. A practical loading platform was fitted with space for fuel cans and a radio, while so-called sand channel stowage was set up and equipped with side extensions for high loads. Regular road tyres were replaced by specialist desert ones.

During expeditions into the desert, Bagnold had developed a special condenser that recovered the steam from the radiator and used it again so that precious water wasn't lost. He also designed a sun compass to make navigation easier in the desert.

Each vehicle in the unit was equipped with several machine guns. Each patrol also had a car with a radio and one with a more effective anti-tank gun, either a Bofors 37-mm anti-tank gun or, later on, a Breda 20-mm anti-aircraft gun captured from the Italian army. Gradually, the armaments were stepped up, and the vehicles were upgraded. By the ►

**“DEMANDS ON ITS SOLDIERS WERE HIGH. THEY HAD TO BE ENTERPRISING AND WILLING TO GO WITHOUT”**



A Long Range Desert Group shooter aims his Vickers machine gun. Photo from May 1942.

GRAHAM/NO 1 ARMY FILM & PHOTOGRAPHIC UNIT/IMPERIAL WAR MUSEUM



HISTORICARCHIVE

**General Archibald Wavell.**



## LONG RANGE DESERT GROUP

- end of the unit's life, the patrols possessed jeeps with an incredible amount of firepower.

The LRDG's demands on its soldiers were high. They had to be enterprising and willing to go without to cope with long periods in the desert. Soldiers with experience of the countryside who treated their vehicle as if it were a prized horse were preferred to those from towns and cities who cared less about their vehicles. All personnel were volunteers, and the crews were carefully selected from large numbers of applicants – it was quite common for non-commissioned officers to drop a rank to gain admission. It was easy to get kicked out of a patrol – poor attitude or performance resulted in soldiers immediately being returned to the unit from which they'd come.

**IN FEBRUARY 1941**, the Long Range Patrol unit was reorganised as the Long Range Desert Group. It consisted of two squadrons with a total of ten patrols as well as a sabotage unit and a heavy section with supply vehicles. Within nine months, Bagnold had built a first-class unit that included 252 men and

**“[IT SHOWED] HOW A WELL-LED FORCE – EVEN WITH MODEST RESOURCES – COULD STILL MAKE A SIZEABLE DIFFERENCE”**

97 specially equipped vehicles. Since the RAF did not want to provide air support, they later bought two biplanes of their own on the civilian market.

While the Desert War raged back and forth along the Mediterranean coast, the LRDG often operated on month-long missions from the Siwa, Kufra and Jalo oases. With only light vehicles and weapons, the patrols could not openly engage armoured vehicles, nor could they storm well-defended forts.

Their best protection against air strikes was cunning, camouflage and mobility. Assignments were adapted to the immediate needs of the war, which varied widely depending on how the British





were faring. Road observations provided intelligence about enemy transport movements, which helped British headquarters in Cairo with its planning. The LRDG's mapping and reconnaissance efforts became invaluable in planning the British offensive.

Raids on the enemy's transport convoys prevented supplies and personnel reaching the front line and forced the Italians and Germans to protect their convoys by redeploying armoured vehicles and troops from the front. Italian desert forts, originally designed to keep the locals in check, also became a target and many surrendered to the LRDG.

**ONE IMPORTANT MISSION** was to lead Colonel David Stirling's special SAS force to the coast on what were dubbed "Libyan taxi service" jobs. Bagnold's desert patrols were masters at navigating and could lead commando forces both to the target and then back to base. Thus, the SAS was able to knock out as many aircraft on the ground as the RAF did in the air.

The Desert Group launched an early joint operation with the French in Chad to capture the

key oasis at Kufra. Its last major mission in the Desert War, which ended in the spring of 1943, was to guide the Free French Forces and New Zealand troops to Tunisia, where a German-Italian panzer army was eventually defeated.

But the war did not end there. The Long Range Desert Group continued its operations during World War II both in Greece and the Balkans, and many of its recruitment, training and operating methods continue to inspire other special forces to this day.

The LRDG ceased to exist in 1945, but it is still remembered for two key reasons. Firstly, it showed how the tenacity and vision of one man could change an army's mindset, and secondly, it demonstrated how a well-led force – even with only modest resources – could still make a sizeable difference to a war's outcome. 🇬🇧

**Karl-Gunnar Norén** is a writer and in 2012 participated in a research expedition in original WWII jeeps that followed the tracks of the LRDG for hundreds of kilometres.

The desert made great demands on soldiers and equipment. The patrols were equipped to last up to 20 days in the desert terrain. May 1942.

READ  
MORE ABOUT  
THE WILLYS  
JEEP OVER  
THE PAGE





# Special Air Service Picked up Willys for Sahara missions

**US-made jeeps adapted to the North African climate became an effective weapon for the elite SAS (Special Air Service).**

**T**oday the British SAS, the Special Air Service, is synonymous with the *crème de la crème* of the world's special forces. This was not the case at its birth. Many regular soldiers were surprised by its unconventional methods. Their scepticism changed when the unit struck German air bases in North Africa with its specially equipped jeeps, destroying hundreds of aircraft.

The SAS was formed in 1941 from commando units that were part of Layforce, a commando brigade in North Africa that utilised sea landings. A young captain there, David Stirling,

suggested airdropping smaller forces as an alternative and was permitted to train a unit called L Detachment SAS. Stirling's idea was to attack Axis airfields and knock out enemy planes on the ground. The force would then be recovered by the Long Range Desert Group (LRDG), whose reconnaissance behind enemy lines saw its men utilise armed light trucks for their missions.

**HOWEVER, THE FIRST** SAS operation was a disaster. The paratroopers were scattered over a large area and then failed to make contact with the LRDG,



**Briton David Stirling laid the foundations for the SAS.**

HISTORIE ARCHIVE

with only 22 of 62 men returning. In subsequent raids, they were both deployed and recovered by the LRDG, and the number of aircraft destroyed rose sharply. A major milestone was reached when the SAS gained access to US Willys jeeps, made possible by the 1942 Lend-Lease agreement. These fast, agile vehicles were modified for airfield raids and were far more suitable than the LRDG's trucks.

**ENGINE COOLING WAS** adapted for the extreme desert climate. Most of the radiator grille was cut away to provide better airflow to the radiator. A condenser tank was mounted in front of the grille on the right side to boost cooling and recover evaporated water.

Typically, there were deep-tread off-road tyres on the rear axle, but fine-tread road tyres on the front. These provided better steering as they did not dig into the sandy surface.

To attack air bases, but also provide protection against attacking aircraft on the move, the jeeps were equipped with drum-fed 7.7-mm Vickers K machine guns in twin mountings on the bonnet and at the rear. These had been obtained from the RAF.

Over time, some jeeps were equipped with heavier armament: a 12.7-mm Browning alongside a single K gun. The windscreen was removed to give the guns a better field of fire and to avoid glinting in the sun. Soldiers also carried firearms. Thompson-type machine guns were popular, as was the captured German MP 40. The Lewis bomb was developed

**Two specially adapted SAS jeeps in Egypt in 1942 or 1943. The soldiers wear a mixture of army uniforms and traditional Bedouin clothing more suited to the desert climate.**



HISTORIE ARCHIVE

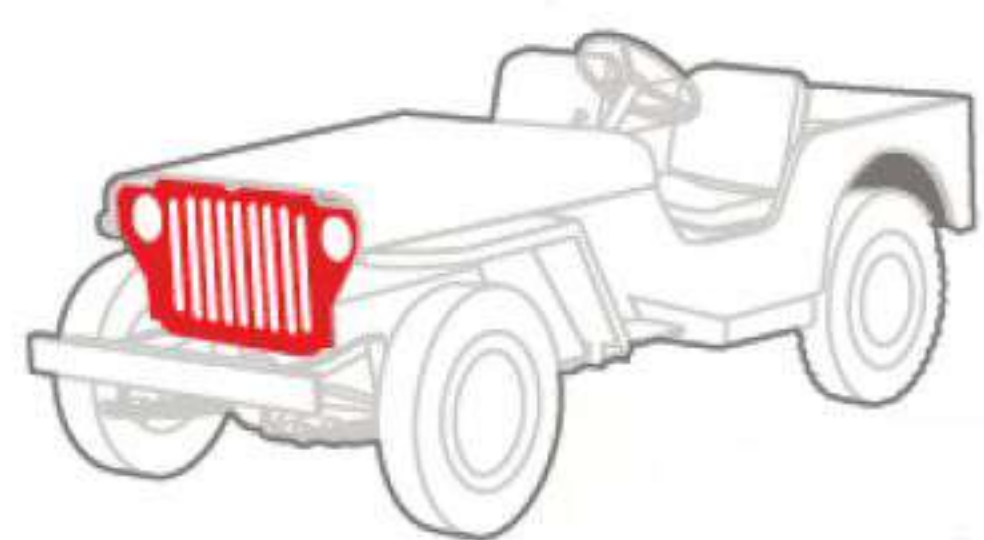


## Desert jeeps

To navigate the challenging desert terrain, British special forces used a modified version of the jeep.

**Camouflage** Base colour sand. Speckled pattern of green, pink and yellow-white.

**Radiator grille** Partially cut away to provide better airflow.



**Condenser tank** Installed to provide additional cooling by capturing and reusing steam from the radiator.

**Tyres** Often fine tread at the front, which made steering easier as they did not dig into the sandy surface. Rear tyres were off-road, so deep tread.



**Armament** Usually twin Vickers 7.7-mm K guns.

**Fuel** This was stored in extra cans. Water, food and oil were also carried.

### WILLYS MB JEEP

**Engine:** Willys L134 "Go-Devil", 60 horsepower.

**Length:** 3.36 metres.

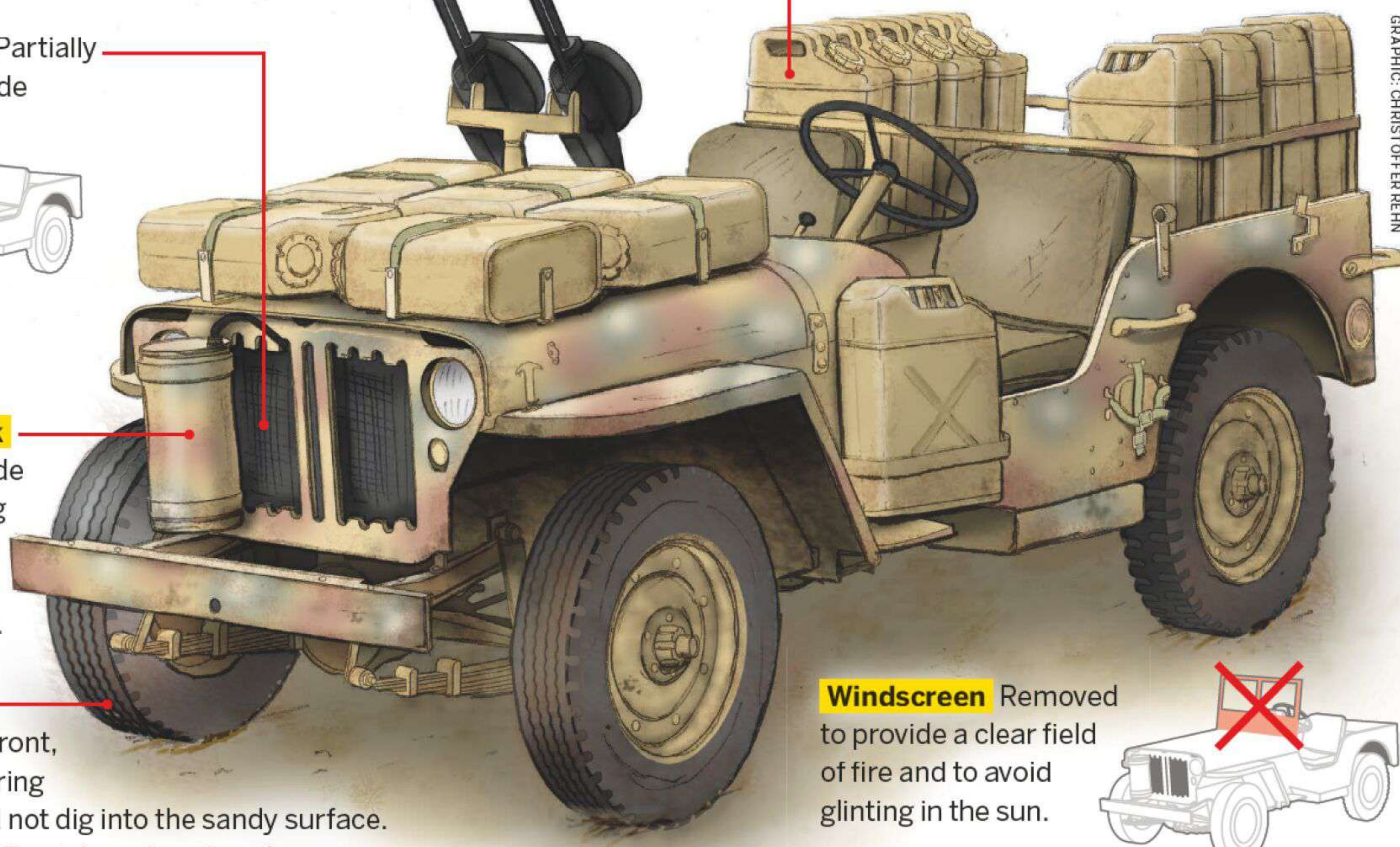
**Weight:** 1.11 tonnes.

**Top speed:** 105 km/h.

**Manufacturer:** Willys-Overland Motors.

**Model year:** 1941-45.

**Number built:** 359,489 units.



**Windscreen** Removed to provide a clear field of fire and to avoid glinting in the sun.



for the missions. If the small explosive charge was placed in the cockpit or engine room of a plane, it could completely destroy it.

To navigate in the desert, where there were often no landmarks, a standard magnetic compass was carried by the driver, which also came from decommissioned RAF equipment. There was also a solar compass.

**FUEL FOR THE** mission was carried in several extra cans mounted on the sides of the cargo hold. These were obviously a significant fire hazard in combat. There were also cans of drinking water, oil, food and field

dressings. Emergency packs with supplies were placed by each seat.

**CAMOUFLAGE IN THE** form of nets was very important, as during the daytime the jeeps were often parked to avoid being observed by reconnaissance aircraft. The painting was specialised: over the sandy base colour, a mottled pattern of green, yellow-white and pink was sprayed. The Desert Pink shade was particularly suited to the lighting conditions in much of the desert and some vehicles were painted entirely in this colour.

Similarly modified jeeps were also used by the LRDG

and another unit in the desert, No 1 Demolition Squadron. Also known as Popski's Private Army (PPA), this was set up in late 1942 to knock out the Afrika Korps' fuel depots.

Over 300 Axis aircraft were destroyed by the SAS in North Africa. That was more than the RAF destroyed in the air.

After the war, the SAS replaced the Willys with different types of Land Rovers. These were used in Oman and Iraq, for example, and their pink shade has seen them dubbed the Pink Panther. 🇬🇧

**Richard Areschoug** is a military history writer.

**"OVER 300 AXIS AIRCRAFT WERE DESTROYED BY THE SAS IN NORTH AFRICA"**



**Six-Day War 1967**

# **LIGHTNING ISRAELI ATTACK**

Israeli armoured troops  
man Centurion tanks  
during mobilisation on  
23rd May 1967.





During six days in June 1967, Israel's army defeated its neighbours Jordan, Egypt and Syria at breakneck speed. Israeli forces attacked pre-emptively, fearing that the Arab world wanted to wipe them out. The war had an influence on the situation in the Middle East that continues to this day.

Text: **ARTUR SZULC**

THREE LIONS/GETTY





## SIX-DAY WAR 1967



f all the wars that have been fought between Israeli and Arab forces since the late 1940s, the so-called Six-Day War can be identified as by far the most decisive for Israel's current borders and its security and domestic challenges. This war would come to define the Arab-Israeli conflict right up until the present day. Its origins can be traced to the Israeli Declaration of Independence in 1948, when several Arab states attacked the new country. Israel survived the ordeal, while the setbacks created bitterness and a strong desire for revenge among Arab leaders.

The direct causes of the outbreak of the war began with events in the mid-1960s. Several security-related incidents occurred, particularly on Israel's border with Syria and Jordan. In the background were raids into Israeli territory by Palestinian fighting groups such as Fatah under Yasir Arafat, and a dispute over the waters of the River Jordan and the Sea of Galilee. Jordan's King Hussein disagreed with his country being used as bait for Israeli retaliation and withdrew his recognition of the Palestinian Liberation Organisation (PLO), which had been established in 1964. Fatah raids continued, and in November 1966, Israeli forces entered the southern West Bank to attack Palestinian villages suspected of being Fatah strongholds. The incursion was not tolerated by the Jordanian military and fighting broke out. After that, relations between the countries remained tense.

**REGARDING WATER RESOURCES,** Damascus intended to build diversionary canals that would deprive Israel of a considerable amount of water. Tel Aviv declared that attacks on its water supply would be met with military force and in 1965 Israeli aircraft attacked Syrian canal construction. This led to Syrian retaliation and by the spring of 1967, Syrian artillery positioned on the Golan Heights had fired on Israeli communities on several occasions. In early April of that year, Israel grew tired of the provocations. Following Syrian shelling of Israeli villages, fighter jets were launched on both sides and full-scale air battles were fought. The Israelis shot down six enemy planes, and tension rose in Damascus as both Israel's Chief of Staff Yitzhak Rabin and Prime Minister Levi Eshkol openly announced that further Syrian shelling would have serious repercussions.

At this point, the Syrians turned to their partner, the Soviet Union, which was critical of Israel's rhetoric and approach to the Arab states. In other words, the Cold War dynamic became an additional dimension to the Israeli-Arab conflict. Moscow, assuming that Damascus would not be able to



GOVERNMENT PRESS OFFICE

withstand a more robust Israeli military response, began to galvanise President Gamal Abdel Nasser of Egypt into action. With Nasser's authority in the Arab world questioned and reproaches from the Syrian side that he was not doing enough for the Palestinians or to oppose Israel, some historians argue that Moscow saw an opportunity to strengthen its position in the region and undermine the reputation of the West by provoking explicit US support for Israel. It was in the Soviet Union's interest to sharpen the tension between Israel and its Arab neighbours, although the Kremlin did not want to provoke an outright war.

To achieve this, the Soviet regime deliberately passed on false reports to Nasser that the Israelis

**Israeli Defence Minister Moshe Dayan (left) and Chief of General Staff Yitzhak Rabin walk into Old Jerusalem through the Lion's Gate after the city was captured.**



## Pre-war escalation

★ A series of events between 1966 and 1967 exacerbated tensions between Israel and its Arab neighbours.

**14th May 1967:** Egyptian President Gamal Abdel Nasser mobilises Egyptian forces in the Sinai Peninsula.

**13th November 1966:** In response to Palestinian attacks, Israel attacks as-Samu in Jordan-controlled West Bank.

**Palestinian guerrillas**, with bases in Lebanon, Syria and Jordan, carry out a series of attacks in Israel.

**7th April 1967:** In an air battle, Israeli fighters shoot down six Syrian MiG fighters. A Soviet report suggests Israel is planning military action against Syria.

**30th May 1967:** King Hussein of Jordan arrives in Cairo and signs a defence pact with Egypt. Soon after, Iraq announces that it is joining the alliance.

**22nd May 1967:** Nasser orders a blockade of the Straits of Tiran, thus preventing oil shipments reaching Israel via the Red Sea.

### Troop distribution at outbreak of war

 **ISRAEL**

**Troops:**

50,000

**Reserves:**

214,000

**Fighter aircraft:**

250–300

**Tanks:**

800

 **EGYPT**

 **SYRIA**

 **JORDAN**

 **IRAQ**

**Troops:**

547,000

**Fighter aircraft:**

957

**Tanks:**

2,504

(Lebanon donated two fighter jets)

ILLUSTRATION: JOHNNY OBERG

had concentrated military forces on the border with Syria. Nasser trusted the Soviet information.

Under pressure and encouragement from various quarters, and misled by his friend, Minister of Defence Abdel Hakim Amer, about the capabilities of his own forces, Nasser decided to assert his authority and show the outside world that the defence pact with Syria was not a hollow declaration.

**NASSER NOW MADE** three crucial decisions that together created a threatening situation – in the eyes of the Israelis. From 15th May, several Egyptian divisions began moving through Sinai to take up positions near the Israeli border. Meanwhile, Syrian and Jordanian units also increased preparations. A

## “NASSER DECIDED TO ASSERT HIS AUTHORITY”

few days later, Nasser demanded that the UN force that had been stationed along the Egyptian-Israeli border since 1956 be withdrawn, which it was.

As a final measure, Cairo closed the Straits of Tiran to Israeli shipping on 22nd May, which Israel considered an act of war in itself. Israel could not just sit back and watch Egypt's aggressive behaviour. Partial mobilisation began on 19th May, while the government and military leadership began discussing how to deal with the situation. Concern that inaction could lead ▶



**Gamal Abdel Nasser**

HISTORIC ARCHIVE



## SIX-DAY WAR 1967

► to the destruction of the nation was weighed against the realisation of the sacrifices a war would require.

**BUT ALTHOUGH THE** charged state of the region, specifically the issue of the Straits of Tiran, was discussed at the highest level of the UN, no diplomatic solution was in sight. On the contrary, Arab propaganda grew in strength and daily radio broadcasts threatened Israel with annihilation. On Soviet advice, Nasser had cancelled an air strike against Israel on 27th May. It was important that Egypt did not strike first, Moscow argued.

Israel continued to call up reservists, which had a crippling effect on the national economy, and the question of how long the readiness could be maintained

## “ISRAELI GOVERNMENT WAS PERSUADED THAT ATTACK WAS THE BEST DEFENCE”

also worried the Israeli leadership. However, the wavering Israeli politicians were aided in their decision-making by continued Arab sabre-rattling. On 30th May, Egypt and Jordan unexpectedly concluded a defence agreement that placed Jordanian troops under Egyptian command. This angered the leftist regime in Damascus, which regarded King Hussein as a reactionary and an enemy of the revolution. The

MICHAHAN/GPO/GETTY  
**Mechanised units approach Egyptian troops on 5th June near Rafah in the Gaza Strip.**





following day, an Iraqi mechanised division began rolling into Jordan, at King Hussein's invitation.

Egypt's blockade of the Straits of Tiran and the military build-up of Arab countries backed Israel into a corner. Its government was eventually persuaded by its military leaders to accept that it was vulnerable, and attack was the best defence. Despite US advice not to attack first, Prime Minister Levi Eshkol authorised a pre-emptive strike against Egypt in early June. What follows is a day-by-day account of the fighting.

**5  
JUNE**

**THE ISRAELI GROUND** attack in Sinai was preceded by a massive air strike against Egyptian airbases, called Operation Focus. Thanks to intelligence

work and information provided by Egyptian informants, Israel knew all about the Egyptian air force's patrol routes, when base personnel changes occurred, and the routines of pilots and commanders. Analysis determined that the best time for a coordinated air strike was 07.45 Israeli time (08.45 Egyptian time). The Egyptians had just finished their patrols and the pilots were eating breakfast. To achieve maximum effect, almost every Israeli fighter and attack plane – 200 aircraft – was used in the attack. Only 12 planes were left to protect Tel Aviv.

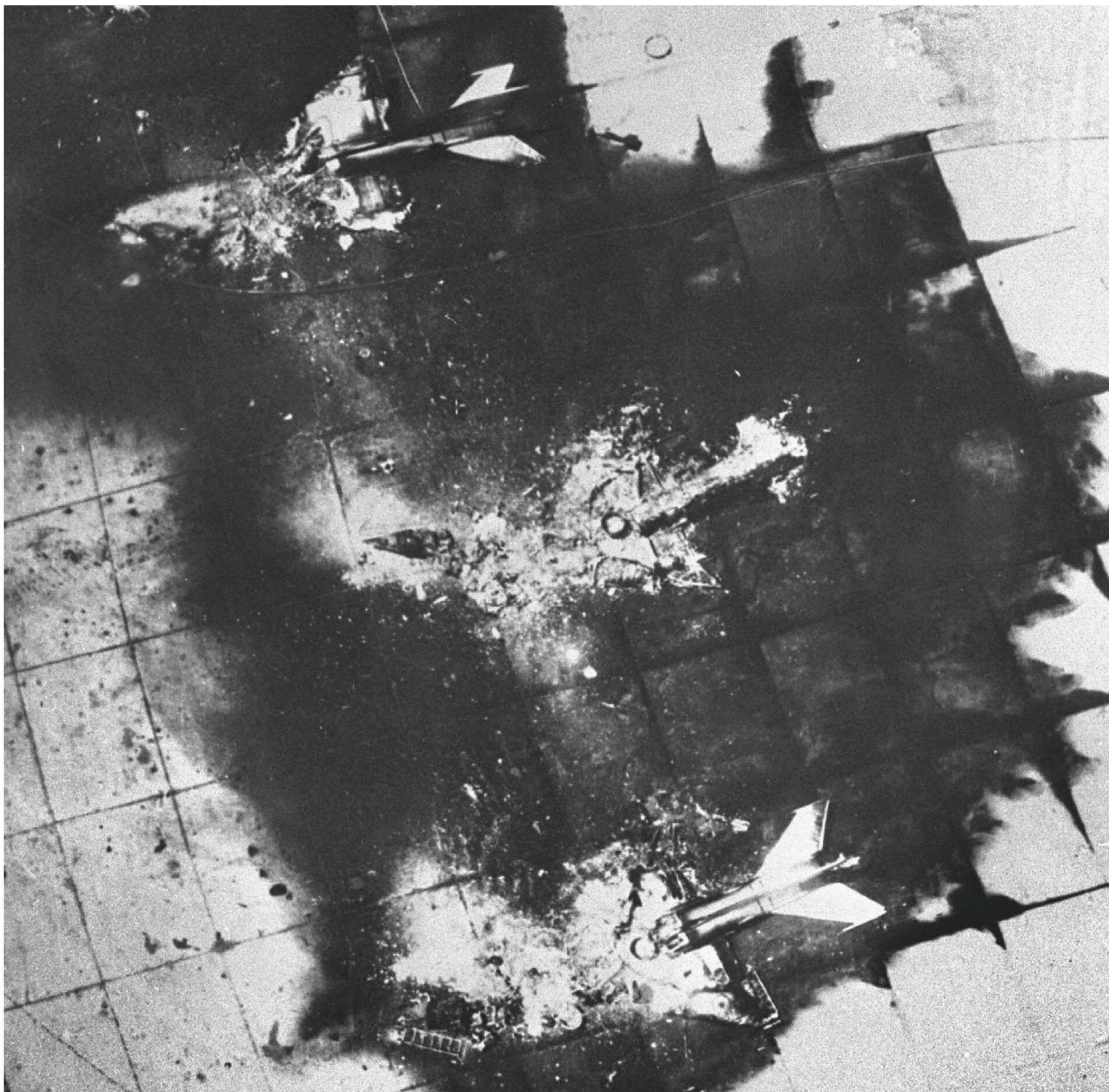
**STARTING AT 07.15,** the aircraft took off from airfields around Tel Aviv and in the Negev desert, gathered in formations and headed for the ►





## SIX-DAY WAR 1967

GOVERNMENT PRESS OFFICE/GETTY



**Egyptian MiG-21 fighter jets lie destroyed at airbases after the Israeli air force's pre-emptive strike.**

► Mediterranean Sea. Five minutes earlier, a group of 16 training aircraft had taken off from the Hatzor base (south of Tel Aviv) and flown out over the water, as they had done every day for several years. Both this force and those from the Negev desert were detected by Egyptian radar operators, as intended.

**THE HOPE WAS** that the Egyptians, slowly getting used to the Israeli morning flights, would interpret the manoeuvre as routine. The only ones who were suspicious were the Jordanians, who had modern British radar equipment. The number of Israeli planes in the air was unusual and this was conveyed to Lieutenant General Abdul Riad

– Egyptian commander of Jordanian forces – who in turn sent a warning in a coded message to the headquarters of the Egyptian minister of defence. No one there took note of the warning because the radio codes used by Riad had just been replaced without Cairo informing him of the change.

While the training planes carried out their routine flight, the attack formations observed radio silence and made sure to fly low, close to the water's surface, to avoid enemy radar. After some time in the air, the armada turned south and approached the Egyptian coast and the Nile Delta from the west. The pilots scrambled their fighters to get into an attack position, which meant they were picked up



## “AT 07.45, THE FIRST BOMBS FELL ON MORE THAN TEN AIRBASES”

by radar stations, but by then the Egyptians had already been outsmarted. At 07.45, the first bombs fell on more than ten airbases in the Sinai and west of the Suez Canal.

Fighter pilot Iftach Spector took part in an attack on an airbase outside Cairo, where a regiment of Tupolev Tu-16 bombers was stationed. “Just a calm, straight dive until the runway filled my gun sight like long, black strip, broadening as I went lower. Exactly at the right height and on target I gave the bombs button a nice, long press,” Spector wrote afterwards. Within seconds, his bomb made a crater in the runway and Spector prepared for a follow-up attack with his automatic guns, targeting mainly stationary fighters, but also radar stations and artillery positions.

**ON SOME RUNWAYS,** the Israelis used a new type of bomb that stabilised itself in the air using rockets and hit the concrete at an angle, whereupon another rocket fired and drove the bomb into the runway. The result was a deep crater that was difficult to repair.

Once Spector had finished over the target, the next wave of four aircraft arrived, and so it went on for two hours. Israeli ground personnel armed a plane in eight minutes, which, with flight time, rest, refuelling and re-arming included, meant the same fighter could be deployed against Egyptian targets within an hour. The Egyptians

managed to send up 30 fighters but all were either lost in air battles or crashed when the pilots could not find an undamaged airfield to land on. The Egyptian air defence system was not very effective either. It had been forbidden from firing because the minister of defence, Abdel Hakim Amer, and the chief of the air force, Mohammed Sidki Mahmoud, were in an airborne command centre and there was the risk of friendly fire.

While the air force continued its raids in the morning, the ground attack had already begun. At 08.15, three armoured divisions rolled towards Egyptian units in the Sinai Peninsula. The offensive was divided into three phases: breaking through the defence lines at three points (Khan Yunis-Rafah, Abu-Ageila and Kusseima), cutting the retreat routes and attacking the Egyptian army.

Only the important first phase was planned; the other two were merely sketched out. Their practical implementation would be improvised depending on how the tactical situation changed in relation to Egyptian countermeasures.

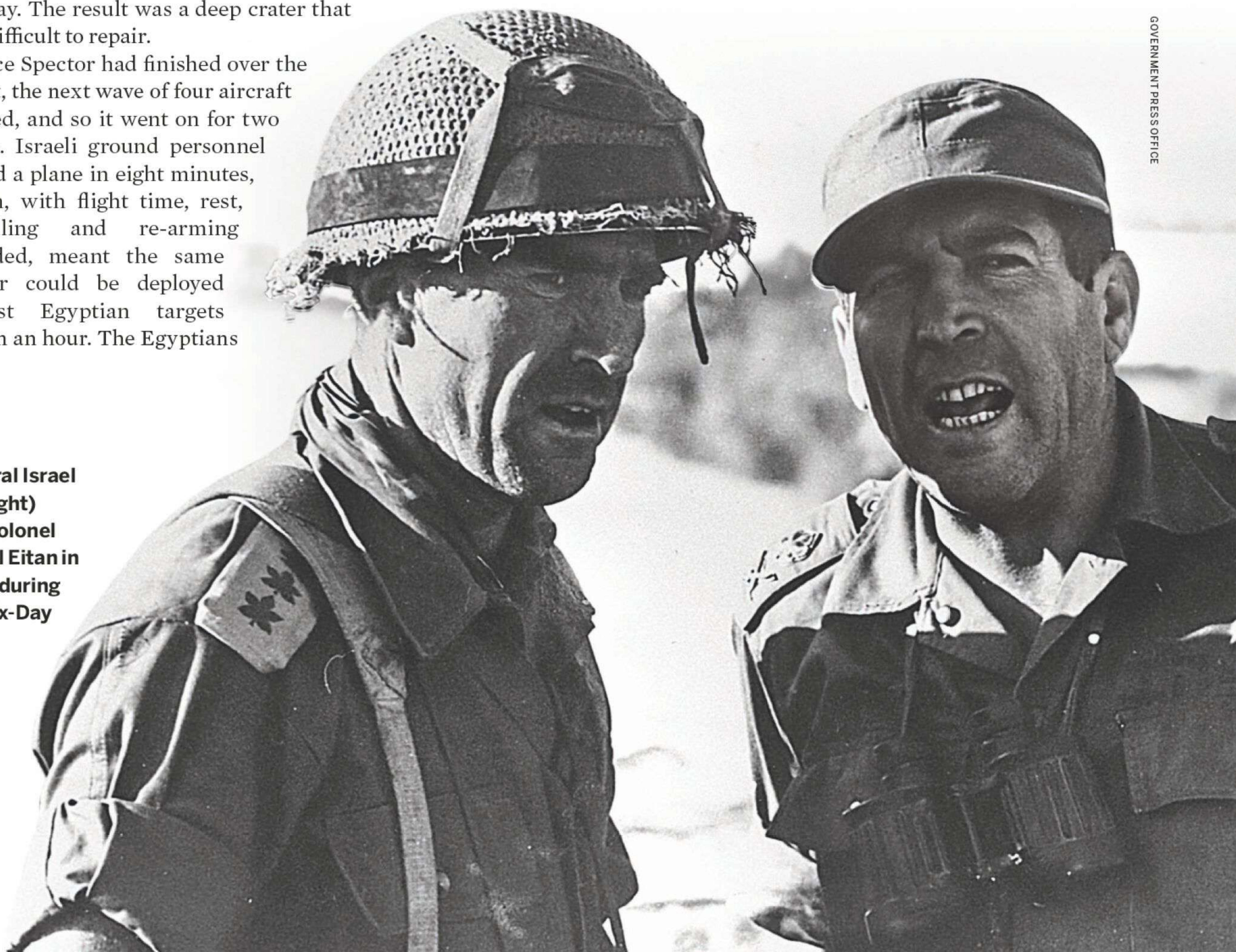
**GENERAL ISRAEL TAL’S** 84th Armoured Division had al-Arish as its first objective. In order to stay out of reach of Egyptian artillery and avoid the densest minefields, the offensive was to be ►



**Israeli bombs dug into the runways, rendering them unusable.**

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**General Israel Tal (right) and Colonel Rafael Eitan in Haifa during the Six-Day War.**





## SIX-DAY WAR 1967

PHOTO 12/UNIVERSAL IMAGES GROUP/GETTY

Israeli tanks rush towards Egyptian positions in the Sinai Peninsula.



- made through the Jiradi Pass, between the towns of Khan Yunis and Rafah. The area was defended by the Egyptian 7th Infantry Division and the Palestinian 20th Division. Before the attack, Tal told his soldiers: “If we are to win the war, we must win the first battle. This battle must be fought with no retreats; every objective must be taken – no matter the cost in casualties. We must succeed or die.”

**THEY FIRST TRIED** to bypass enemy positions in front of Khan Yunis, but on the outskirts of the town, Israeli battalions clashed with Palestinian units that opened fire with machine guns and anti-tank weapons. Several Israeli tanks were knocked out, but the Palestinians were unable to stop the attack. Meanwhile, a brigade had moved towards Rafah, concentrating on knocking out Egyptian artillery positions. The front lines were now abandoned by the Egyptians. Rafah was taken in the evening after intense fighting. With the city in Israeli hands, other Egyptian and Palestinian forces were isolated in Gaza.

Meanwhile, the morning attacks on Egyptian airfields in Sinai and northern Egypt were followed by attacks on airfields further south. A few runways were spared, such as the one at al-Arish, as the

Israelis planned to use them themselves in the future. In total, 19 bases were hit, with devastating consequences for the Egyptians. They lost most of their fighter aircraft, more than 280 planes, and up to a hundred pilots were killed. In comparison, the Israeli losses were minor – 19 planes lost.

By the afternoon, Israeli air forces had also attacked Syrian and Jordanian airbases and one in western Iraq; 28 Jordanian aircraft were destroyed as well as nearly 60 Syrian planes. The Iraqis lost ten aircraft. Thanks to the success of the air raids, particularly against Egypt, the Israelis achieved total air superiority and were able to utilise their air forces in direct support of ground operations, as well as continuously threatening enemy units from the air. In a sense, the war was decided on the first day.

**AFTER DUSK, MUCH** of Tal's division was involved in the attack on the Egyptian town of al-Arish, where there was a military base. Al-Arish was also an important communications hub, so it was vital it was captured for further operations. The area around the city was heavily fortified and tank units had to knock out rows of concrete defences and bunkers along the way. It was not until dawn



## Initial attacks

★ Israeli fighter jets struck airbases in Egypt in the morning. Shortly afterwards, Israeli armoured divisions stormed into the Sinai Peninsula. Airbases in Syria and Jordan were also knocked out.

100 km



ILLUSTRATION: JOHNNY OBERG

that Israeli soldiers broke down the defences and Tal's two armoured brigades rolled into al-Arish.

Further south, the 31st Armoured Division under General Avraham Yoffe and General Ariel Sharon's 38th Armoured Division also scored successes on 5th and 6th June. The 31st Armoured Division had advanced through the dunes towards Bir Lahlum and captured the town by the afternoon.

A formidable task lay ahead of Sharon's units. The 38th Armoured Division had to drive the enemy away from Abu-Ageila, where 8,000 Egyptian soldiers from the 2nd Infantry Division and almost 80 tanks were entrenched in fortified positions. There was fire support in the form of six artillery regiments, including Soviet 122-millimetre guns and heavy mortars. It was thus an extensive defence complex with underground tunnels, minefields, barbed wire barriers and deep trenches. A success at Abu-Ageila – the backbone of the Egyptian defence line – would leave the door to Sinai wide open. Sharon assembled his division during the day and only after sunset did his soldiers attack.

**THE PLAN COMPRISED** several synchronised elements. Parachute units would be flown in with the task of knocking out Egyptian artillery, which

## “A FORMIDABLE TASK LAY AHEAD OF SHARON'S UNITS”

was positioned some distance behind the main defence line. Meanwhile, a tank regiment would advance along a northern route to fall in behind the Egyptian positions, while infantry would clear the firing lines, starting on the northern flank. The attack began with heavy Israeli artillery fire. Afterwards, Sharon said that for half an hour, the intensity of the firing had been unbelievable and he had never seen anything like it in his life. Soon after, he ordered the paratroopers to storm Egyptian artillery positions.

**THE SINAI OFFENSIVE** was understandably the top priority. However, the Israelis wanted to avoid an open armed confrontation with Jordan, and this was communicated to King Hussein via the local UN chief, General Odd Bull. But Hussein had been misled by Field Marshal Amer, who claimed that the Egyptian forces had more or less wiped out the Israeli air force and that the ground attack in the Negev desert was underway. King Hussein ►





**Jordanian soldiers train on the border with Israel, days before the start of the war.**

► therefore said nothing when Lieutenant General Riad ordered artillery to be deployed against East Jerusalem and Tel Aviv. Subsequently, some Israeli communities were attacked by Jordanian aircraft.

Apart from an operation against two Jordanian airbases, the Israeli side waited to deploy its ground forces. It was only when Jordanian troops advanced into the demilitarised zone and captured the old government building in South Jerusalem that General Uzi Narkiss was given the go-ahead for an offensive against the West Bank and East Jerusalem. The aim was to prevent a possible Jordanian encirclement of West Jerusalem and to continue westwards from Nablus towards the coast. Such a manoeuvre would risk splitting Israel in two.

**THE JORDANIANS HAD** placed six infantry brigades in the West Bank, from Jenin to Hebron, and one in reserve east of Jerusalem. Behind the infantry formations were two armoured brigades, the 40th stood ready at the Damia Bridge, while the 60th was on standby around Jericho. Against these, Narkiss could pit three infantry brigades and one armoured brigade. Working in

## **“JORDANIANS PUT UP STIFF RESISTANCE BUT WERE OVERPOWERED FAIRLY QUICKLY”**

the Israelis' favour, the Jordanians had spread their infantry units along almost the entire border. As a result, the defence lines were relatively thin, and an incursion would not be impossible. The difficulties with an offensive into the West Bank were the hilly terrain, minefields and the fact that battles would be fought in densely populated urban areas.

**THE ISRAELIS' INITIAL** objectives were to silence Jordanian howitzers in the Jenin area, retake the government building and take control of the waterways around Jerusalem. In the early afternoon of 5th June, Colonel Uri Ben-Ari's 10th Armoured Brigade began to move north from its starting position. The brigade's task was to clear the heights between Ramallah and Jerusalem. Just

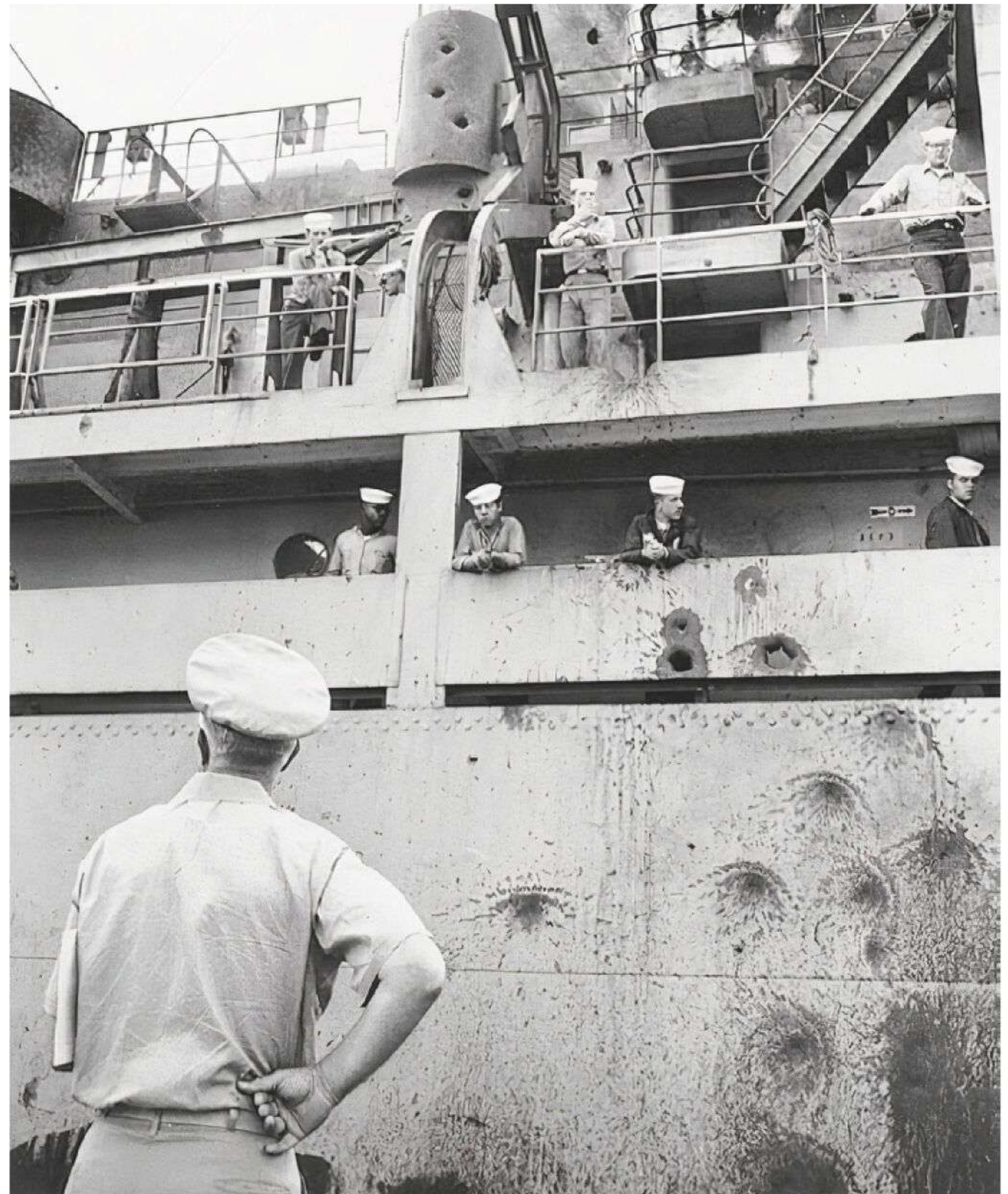


over an hour later, two rifle companies, supported by a tank platoon from the 16th Infantry Brigade, advanced towards the government building on the southern outskirts of Jerusalem. The Jordanians put up stiff resistance but were overpowered fairly quickly. The rest of the 16th Brigade then turned south and by the morning of the following day, controlled the main road from Jerusalem to Bethlehem and Hebron.

While the government building was attacked and the 16th Brigade regrouped for a further advance, a mechanised infantry brigade with tank support entered the northern West Bank with a view to capturing Jenin. At the same time, Ben-Ari's armoured force approached the Jordanian concrete defences on the hills north of Jerusalem. As well as the tricky terrain, the Israelis had to make their way through minefields – made all the more difficult by the fact that all the minesweepers were in Sinai. Instead, the roads were cleared by anti-tank gunners, armed with spikes, who walked in front of the tanks. At dusk, the assaults on the Jordanian positions began. The attacking Israelis knocked out the concrete defences one by one under intense artillery fire. By the early morning of 6th June, the Israelis had broken through to the Ramallah-Jerusalem road.

**THE FIRST FORAYS** into Jordanian lines had been important enough, but the decisive action would take place inside Jerusalem itself. Following discussions between Narkiss and the General Staff on the morning of 5th June, the 55th Paratroopers Brigade, a reserve unit, was transferred to Jerusalem. The paratroopers, under the command of Colonel Mordechai Gur, were tasked with breaking through to the Old City walls from the north while establishing contact with the Israeli enclave on Mount Scopus on the north-eastern edge of Jerusalem. Fighting in populated areas is one of the most difficult forms of warfare, and there was the added risk of destroying sacred sites. To protect both the civilian population and the holy places, Narkiss rejected the option of widespread air strikes against Jordanian strongholds. The paratroopers would therefore attack after midnight, using their night fighting skills. Fire support would come from artillery and tanks. Aircraft would only be deployed when attack targets could be marked by searchlights or flares.

**6 JUNE** **HEAVY FIGHTING CONTINUED** throughout the night at Abu-Ageila until the Egyptian defences were crushed by morning. Reporter Yael Dayan (daughter of Defence Minister Moshe Dayan) who accompanied Sharon's division into Sinai later ►



The attack on the USS *Liberty* claimed 34 lives and caused extensive damage to the ship.

## USS Liberty attacked

★ On 8th June 1967, the American intelligence ship USS *Liberty*, which was in international waters off the Egyptian coast, was attacked first by two Israeli fighter jets and then by Israeli torpedo boats. More than 30 crew members were killed and over 70 were wounded. Israel publicly apologised for the attack and paid compensation to the families of those killed and wounded.

Official US and Israeli investigations explained that human error, lack of communication and the threat of war were behind the attack. Alternative theories as to why the USS *Liberty* was attacked have been put forward. One suggestion is

that Israel wanted to destroy the ship in order to divert world attention from the impending Israeli offensive in the Golan Heights.

Another concerns the possibility that the ship was intercepting the operations of Israel's experimental reactor facility at Dimona, in the Negev Desert. And a third is that the Israelis wanted to prevent the Americans from intercepting information about Israeli crimes against Egyptian prisoners of war in al-Arish. There is no proof that the latter occurred at all, nor are the other attempted explanations, which see more sinister motives behind Israeli behaviour, based on solid evidence.



## SIX-DAY WAR 1967

► wrote: “We saw them early in the morning, our troops clearing and mopping up bunkers and distant positions and outposts, bringing in the wounded Egyptians, and carrying the dead. The place looked as if a hurricane had just struck – there were no victory cries, there was no jubilation, all men were tired and looked exhausted and aged. Only the machine guns mounted in the bunkers and the anti-aircraft guns and mortars were shining in the early sun, indifferent, unmoved by what happened here to their masters.” According to estimates, the Egyptians had lost 300 soldiers, while Israeli infantry losses totalled 14 killed and 41 wounded. Tank losses had occurred on both sides but the Egyptians lost the most, 40 – twice as many as the Israelis. The outcome could have been different if Egyptian infantry and armoured units in reserve behind Abu-Ageila or further south had attacked. But the commanders received no such orders and therefore had done nothing.

Defence Minister Amer was so devastated by the loss of Abu-Ageila that he issued a general order

to withdraw from Sinai. The only problem was that no plan for the withdrawal was ever communicated to the commanders.

Just over 40 hours into the offensive, divisional commanders Tal, Yoffe and Sharon received new orders from the invasion’s supreme commander, General Yeshayahu Gavish. Having broken through the Egyptian lines and forced the enemy into a hasty retreat, the natural next step was to try to block their retreat and eventually engage in mopping-up operations. To achieve this, it was necessary to rush to strategically important routes, including the Mitla Pass and the Giddi Pass. The three armoured divisions therefore turned south-west. Tal divided his division into two columns; one was to advance along the coast, while the other aimed for Bir Gifgafa. Yoffe went towards Mitla and Giddi, while Sharon started rolling towards Nekhel.

**THE VICTORY AT** Abu-Ageila was not the only success achieved by the Israelis on the second day



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**General Yeshayahu Gavish was the commander-in-chief of the Sinai offensive.**

**“TANK LOSSES HAD OCCURRED ON BOTH SIDES BUT THE EGYPTIANS LOST THE MOST”**

GOVERNMENT PRESS OFFICE





of the war. Just over two hours after midnight, two of Gur's battalions attacked in Jerusalem and, as expected, the fighting was extremely fierce and bloody. The paratroopers worked their way towards the police school, held by Jordanian soldiers from the Arab Legion, and the suburb of Sheik Jarah, where a bitter battle was fought over so-called Ammunition Hill. In the attack, Jordanian shells completely wiped out the squads. Afterwards, Gur described the street fighting that occurred as a kind of battle that he had never experienced before. The men had to break through at least five lines of barriers before they reached the pillboxes. They crossed the first line and threw themselves into trenches, but the fighting took place not only in trenches, but in houses, on roofs, in cellars, everywhere. As the paratroopers advanced from one position to another, they saw evidence of the Israeli artillery, which had been extraordinarily effective. By dawn, the battalions had captured the police school and started to push down towards Herod's Gate, at the northern end

of the wall. Meanwhile, other units advanced towards Mount Scopus and secured the enclave before lunchtime on 6th June. The encirclement of East Jerusalem continued after dark when parachute units, supported by one of Ben-Ari's tank companies, advanced towards the Augusta Victoria Hill and the Mount of Olives, east of the city.

Meanwhile, Israeli infantry and armoured forces continued to push deeper into the West Bank. In the north, Jenin was captured on 6th June after a gruelling night battle against two tank battalions of the 40th Armoured Brigade. Israeli aircraft continuously engaged retreating Jordanian forces in the area. In the evening of the same day, Ben-Ari's tanks rolled into Ramallah and within 45 minutes had knocked out several strongholds from which rockets were fired, and the units left the city. The soldiers returned at dawn and occupied Ramallah, with its 50,000 inhabitants, together with the 4th Infantry Brigade, which had previously captured the Latrun Fortress. The 4th Brigade remained in ►

**Egyptian prisoners  
of war are arrested  
outside al-Arish.**





## SIX-DAY WAR 1967

► Ramallah while the armoured brigade soon began to push down towards Jericho.

**WHILE THE ISRAELI** military and political leadership realised that something extraordinary was about to happen, King Hussein experienced probably the most difficult moment of his life. He behaved nervously and seemed unable to make decisions without repeatedly consulting Nasser. Orders and counter-orders to retreat were transmitted to the brigades in the West Bank, creating confusion. It was as though the impending loss of Jerusalem was throwing him off balance.

Attempts to send in reinforcements from the 60th Armoured Brigade and an Iraqi brigade had failed

## “NARKISS WAS GIVEN THE GO-AHEAD TO CAPTURE THE OLD CITY OF JERUSALEM”

**An Israeli soldier takes cover during street fighting in Jerusalem.**

as the columns were decimated in Israeli air strikes. The anxious Hussein would soon send a request for a ceasefire, but this was dismissed by the Israelis, who argued that the king lacked control over his troops. The Israelis did not want to let their certain victory slip away.

**7  
JUNE**

**AS MORNING DAWNED** on 7th June, the Israelis had essentially already won the battle for the West Bank. Narkiss was

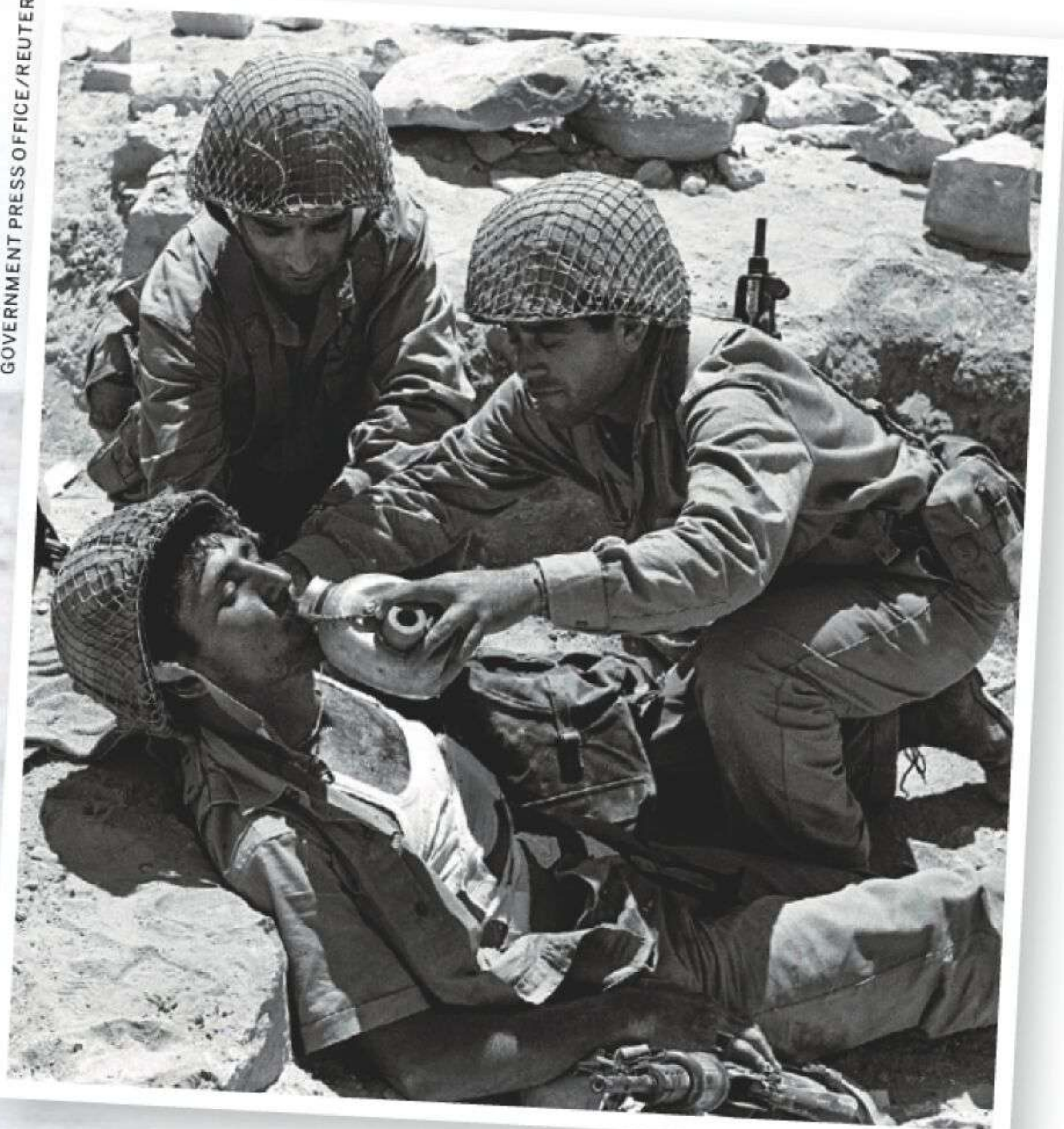
given the political go-ahead to capture the Old City of Jerusalem and after 08.00, the parachute brigade, reinforced with tanks, began its final push.

Jordanian positions at the entrances to the Old City, particularly at Herod's Gate and St Stephen's Gate below the Mount of Olives, were first fired upon by Israeli artillery and tanks. The capture of the gates was swift, with the main danger coming from Jordanian snipers. Israeli casualties during the assault were non-existent. At around 14.00, Defence Minister Dayan arrived and, accompanied by Yitzhak Rabin and Narkiss, visited the Wailing Wall. “We have

UNIVERSAL IMAGES GROUP/GETTY



GOVERNMENT PRESS OFFICE/REUTERS



Field medics give first aid and a sip of water to a wounded soldier during the fighting in Jerusalem.



returned to the most sacred of our Holy Places, never to part from it again,” Dayan proclaimed in a speech.

Around the same time as Dayan’s visit to the Wailing Wall, the 16th Infantry Brigade had advanced southwards towards Bethlehem and Hebron, both of which were subsequently captured in the late afternoon after little resistance. At 20.00, Israel and Jordan entered into a ceasefire.

**FOR THE EGYPTIANS,** despite the Israeli advances, the battle was by no means lost. They still had combat-ready armoured and infantry brigades capable of engaging the enemy. This required commanders who dared to act independently and make decisions without orders from higher command. But no orders came and the units stood idle. Instead, it was the Israelis who took the initiative. By the evening of 7th June, Israeli units had taken control of Mitla and Giddi. A few hours after midnight, Nekhel was also in Israeli hands.

While paratroopers took Sharm el-Sheikh on 7th June, Tal and Yoffe’s units rushed towards Bir Gifgafa, Mitla and Giddi. Meanwhile, Sharon’s division approached Nekhel. There, his soldiers would discover tanks, vehicles and military equipment from an entire abandoned Egyptian armoured brigade.

**8  
JUNE**

**THE FOLLOWING DAY,** Egyptian mechanised units tried to break through Israeli defences while being attacked by Israeli aircraft. Particularly fierce armoured battles were fought around Bir Gifgafa and the Mitla Pass. Hundreds of tanks and armoured vehicles from both sides took part in the fighting. The Egyptians suffered defeat after defeat, with only some units putting up strong resistance and delaying the Israeli advance to the Suez Canal. Despite these Egyptian sacrifices, the Israeli spearhead arrived at Ras Sudr on the canal on the evening of 8th June, where one of Yoffe’s colonels jokingly asked whether they were allowed to wash their feet. During the night, positions were set up along almost the entire eastern side of the waterway.

Jordan was defeated and now it was only a matter of time before Egypt surrendered. So, how would Israel deal with Syria? The curious thing was that Syria, which in a way was behind the escalation of tension before the outbreak of fighting, remained almost entirely passive during the first days of the war. Standard artillery fire, some air strikes and a minor infiltration by a battalion were the only actions it took. On 8th June, Damascus even

**The UN Swedes had to hastily dig in on the Gaza Strip while awaiting evacuation.**



## Swedish UN soldiers shot at on beach

★ Since December 1956, a Swedish UN battalion had been in Sinai with the task of monitoring the ceasefire. In May 1967, the Swedes were stationed in Gaza, and after Nasser’s demand that the UN leave the region, it was decided that they would be transported via Port Said in early June, but the plan was thwarted by the outbreak of war. After a shell hit near the Swedes’ base, shelters were set up on the beach and the troops held out there until the evacuation.

Lars Bylander, a rifle platoon commander, explained:

*We are pushing the envelope. We’re becoming more and more*

*war and combat conscious ... I instil courage in the soldiers. It’s definitely an adrenaline rush to live close to death. I feel no fear, but am more focused on combat management. I am constantly briefing about the situation. The outermost shooting group comes under fire. The squad leader asks to return fire. I inform the company commander and request to return fire. The request is refused.*

Eventually, the Swedes were picked up by Israeli buses, transported to the port city of Ashdod and boarded the Swedish ship *MS Thuleland*, which took them to Cyprus.

announced its acceptance of a ceasefire, but in reality the artillery fire against Israeli kibbutzim continued. The question is whether the Syrian leftist regime ever considered committing its forces to an open war against Israel. The pact between Egypt and Jordan, as mentioned, had angered the Syrians. Despite appeals from Egypt, three armoured brigades and five infantry brigades remained in their positions on the Golan Heights.

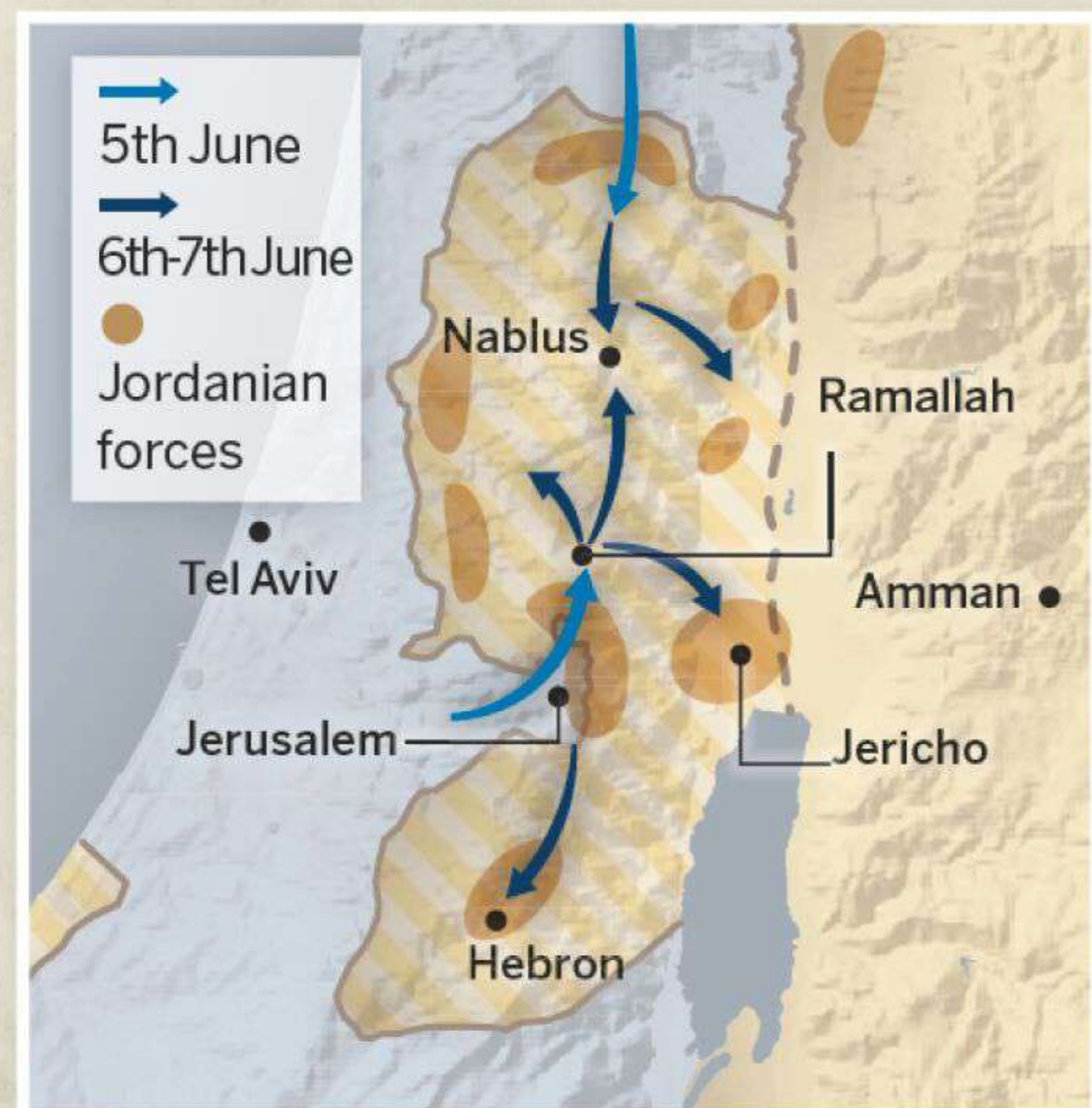
On the Israeli side, politicians were reluctant to attack the heights, fearing, among other things, the Soviet reaction. For the military, the matter was ►



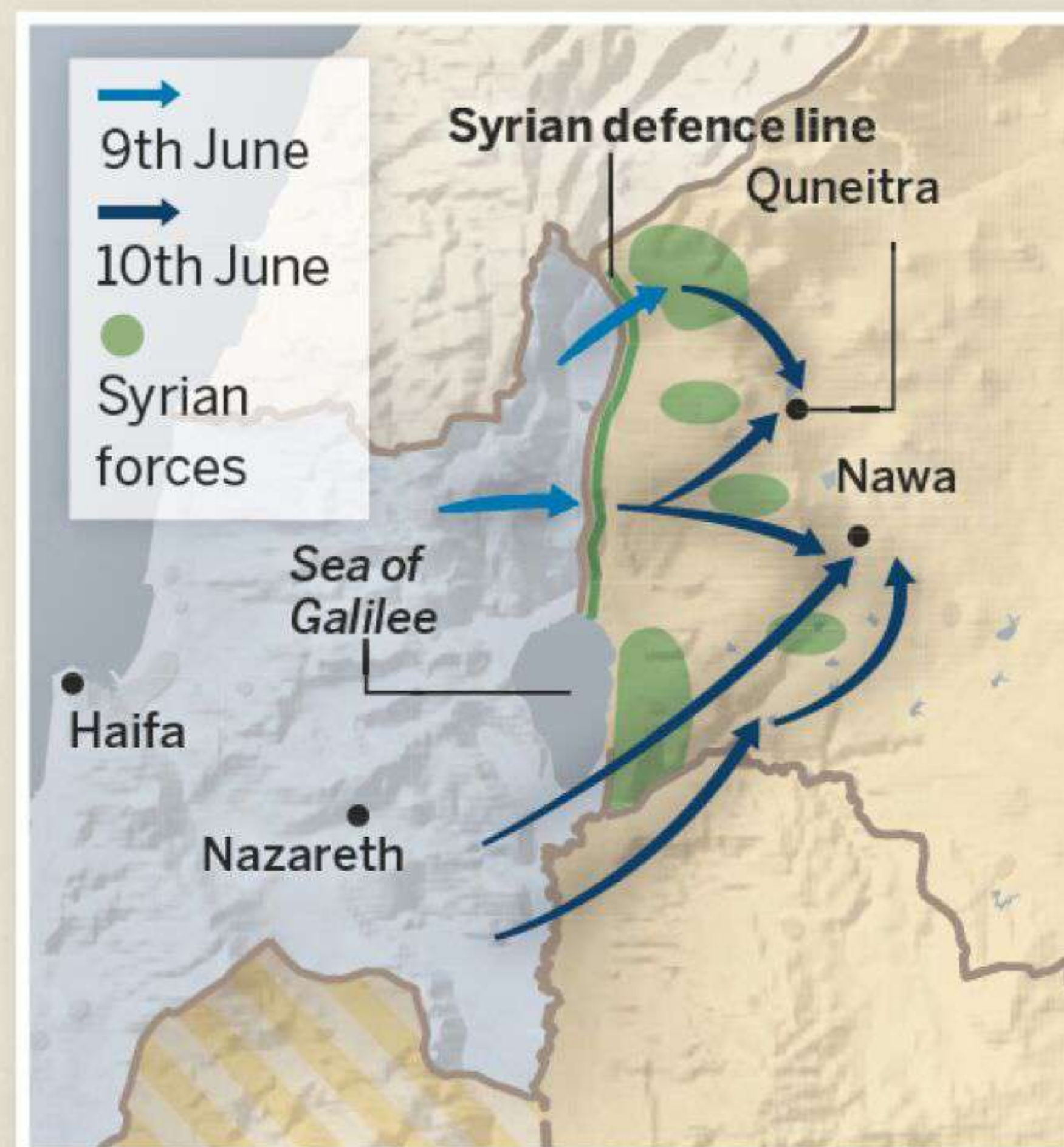
# Borders redrawn after the war

★ In three manoeuvres, Israel captured the West Bank from Jordan, the Sinai Peninsula and Gaza from Egypt, and the Golan Heights from Syria. The West Bank and Gaza are still occupied.

## JORDAN LOSES THE WEST BANK



## BATTLE FOR GOLAN HEIGHTS



## CAPTURE OF SINAI PENINSULA



## ISRAEL AFTER WAR



ILLUSTRATION: JOHNNY OBERG

Smoke rises over the Suez Canal after Israeli artillery fire. In the foreground are anti-tank jeeps with 105-mm M40 grenade launchers.



► clear: the Syrians had to be taught a lesson. Defence Minister Dayan agreed and authorised an offensive.

**9  
JUNE**

**EARLY IN THE MORNING**, Egypt accepted the ceasefire agreed by the UN Security Council two days previously. This allowed Israel to focus its attention entirely on Syria.

In the morning light, Israeli aircraft began bombing Syrian artillery positions and just before noon, the air raids were followed by ground attacks north of the Sea of Galilee.

The priority was to secure the terrain around the main road that ran between Mas'ade and the regional centre of Quneitra, then fall into the rear of the Syrian lines. The commander of the Golan Heights operations, Major General David Elazar, deployed an infantry brigade as well as an armoured brigade in the northern assault that started from the area around the community of Kfar Szold. The terrain was difficult and there were no passable routes. The Syrians regarded an Israeli advance in this area as unlikely and therefore left it relatively undefended. However, should an Israeli attack come that way, the terrain would work in the Syrians' favour and approaching enemy forces could easily be countered with artillery.

In the far north, relatively close to the border with Lebanon, the Golani infantry brigade attacked Syrian positions on the hills around Tel Faher. It was necessary to repel the Syrians from these positions and protect the armoured brigade's advance less than two kilometres further south.

The infantrymen, supported by a number of tanks, advanced under heavy Syrian fire and, despite heavy losses, the battalions pressed forward. Once they reached the Syrian trenches and defences, the battle turned into brutal hand-to-hand combat.

**WHILE THE INFANTRYMEN** were undergoing their ordeal around Tel Faher, the 8th Armoured Brigade worked its way up the slopes towards Qala. At the front of the attacking column were engineer units that cleared mines and obstacles with the help of excavators. Behind them rolled a battalion of Sherman tanks commanded by Lieutenant Colonel Arie Keren.

The rugged terrain forced the tank companies to advance in single file, making them easy targets for Syrian rocket launchers and anti-tank guns. As soon as the attack got past the first Syrian positions, the brigade split up. One force went straight for the main objective, the fortified village of Qala, while another made a flanking movement. After a gruelling journey, three tanks rolled into the village in the early evening and the commander,



TERRY FINCHER/EXPRESS/GETTY

a lieutenant, requested air support. But there was no help, even though there were planes in the air, because the aircraft were overwhelmed with other missions. The lieutenant was told to wait and hold on. To his relief, the Syrian units retreated when they heard the roar of Israeli fighter jets.

By dusk, the heights of Tel Faher and the Qala area were under Israeli control. The breakthrough had been a success and the achievement could now be exploited by well-rested mechanised units.

**FURTHER SOUTH, BATTALIONS** of the Gavish infantry brigade made an advance towards Darbashiya and Tel Hillal. Along some attack routes, engineers had to clear minefields before the infantry could engage enemy positions. They met stiff local resistance from the 132nd Reserve Infantry Brigade and only after intensive air strikes did the Syrian lines break. Motorised infantry attacking over Tel Hillal, however, advanced quickly as the companies avoided direct contact with Syrian bunkers and defences. By lunchtime, Dardara had been captured, and soon afterwards, Tel Hillal was also in Israeli hands. To the surprise of the Israelis, ►

**A victorious Israeli convoy of M3 half-tracks on 8th June.**

**“THE BATTLE TURNED INTO BRUTAL HAND-TO-HAND COMBAT”**



# SIX-DAY WAR 1967

Israeli infantryman with Uzi machine guns during an attack on the Golan Heights.

10  
JUNE

**ON THE LAST** day of the war, the intensity of the fighting dropped significantly as most of the Syrian brigades had withdrawn from the plateau during the night and at dawn. Three brigades were instructed to dig in on the eastern part of the plateau. At 08.45, Radio Damascus announced that Quneitra had fallen after bloody

defensive battles. This was false information aimed at saving the face of the regime and calling for Soviet help. Indeed, Moscow also warned of the consequences if Israel did not cease its offensive actions. This in turn prompted Washington to put more pressure on the Israelis to accept a ceasefire.

A few hours later, Syrian Defence Minister Hafez al-Assad announced on the radio that Syria's brave soldiers would not let the enemy take Quneitra and that many of the enemy's tanks had been destroyed. This attempt to contradict the earlier announcement was in vain. The Syrian units abandoned the Golan Heights as quickly as they could.

In the early hours of the day, Israeli forces continued their advances. In the north, Baniyas was taken by the Golan Brigade, which had been reinforced by the Bar-Kochba Armoured Brigade, and up on the plateau, the 8th Armoured Brigade worked its way down towards Wasit and Mansoura. The units were able to advance reasonably unhindered but occasionally encountered strong resistance from isolated nests. In the early afternoon, Quneitra was taken by the 8th Armoured Brigade – without a fight.

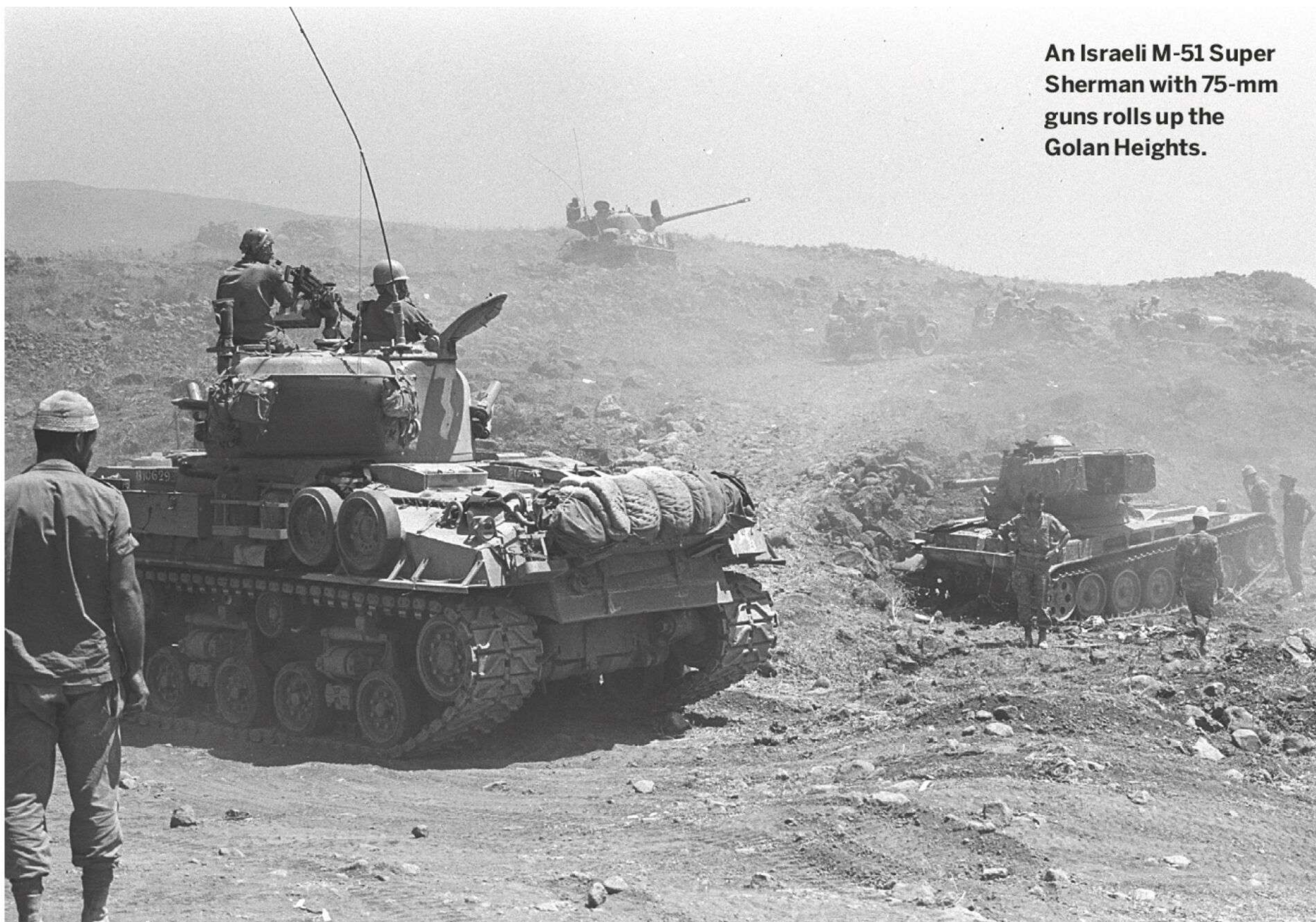
**IN THE AFTERNOON,** a division led by Major General Elad Peled swept through the Golan Heights from locations south of the Sea of Galilee. His units encountered only empty positions and abandoned equipment along the way. Some 800 paratroopers were flown in by helicopter and secured Butmiya, before the ceasefire agreement came into effect at 18.00. The battle for the Golan Heights was over.

When the war officially ended on the evening of 10th June, Israeli troops controlled the Sinai Peninsula, the Gaza Strip, the West Bank including East Jerusalem, and the Golan Heights. Israel had achieved a total victory, not only militarily but also politically and psychologically. It became a leading state in the region and was henceforth regarded as an attractive partner by the United States. The cost of the victory, considering Israel's population at the time (2.7 million), was by no means low: some 800 killed and over 2,500 wounded. The corresponding figures for the Arab countries were between 10,000 and 15,000 killed, 5,000 missing and thousands wounded for Egypt; 700 killed and 6,000 wounded and missing for Jordan; and 450 killed and around 2,000 wounded for Syria. Arab losses in aircraft, tanks, vehicles and artillery were counted in the tens of thousands. Israel had also lost almost 50 aircraft and hundreds of tanks and armoured vehicles.

**PERHAPS MORE SIGNIFICANT** than the losses in manpower and materiel were the psychological







An Israeli M-51 Super Sherman with 75-mm guns rolls up the Golan Heights.

effects of the humiliating defeat suffered by Egypt, Jordan and Syria. Above all, Nasser's reputation in the Arab world declined, although popular support at home seemed unchanged. The Israeli government was prepared to give up its territorial gains, except for East Jerusalem, in exchange for concrete peace deals. But that path was closed by the Arab states at a conference in Khartoum in August 1967, when they decided never to recognise or negotiate with Israel. Only Egypt changed its position after the Yom Kippur War in 1973.

**THE SIX-DAY WAR** was an unprecedented military triumph. Certainly, there were Arab internal disputes, mistakes and shortcomings in the background, but the Israelis showed what well-trained military forces can do despite being inferior in terms of manpower and equipment. The Israeli armed forces applied a decentralised management philosophy in which commanders further down the chain were empowered to make decisions without having to seek approval from higher up. It relied on speed and movement. Therefore, Israeli commanders and officers learnt to seize opportunities. Israeli soldiers had been trained in basic combat techniques and could improvise

## “THE SIX-DAY WAR WAS AN UNPRECEDENTED MILITARY TRIUMPH”

when necessary. They were also extremely adept at utilising the full potential of their weapons systems. In one respect, the difference between the Israeli and Arab soldier was crucial – in battle, the Israeli soldier was motivated by the belief that the very survival of his country was at stake.

With the victory, Israel had once again secured its existence, but the question of what to do with the captured land had begun to be discussed during the fighting. When it became clear that Egypt, Jordan and Syria were not interested in a peace agreement, Israel kept the territories as buffer zones and areas for colonisation. This meant that Israel had a large Palestinian Arab population – 1.2 million – within its borders. With the decision to keep the gains came a conflict that has remained unresolved to this day. 🇮🇱

**Artur Szulc** is a military history writer.



**Toyota War 1987**

# Waging war with trucks

A series of conflicts were fought between Chad and Libya in 1978-87. The last year of fighting was characterised by the Chadian army's use of armed Toyota pickup trucks – which gave the Toyota War its name.

Text: **ANDERS FAGER**



## Equipped with essential weapons

★ In addition to the famous trucks that gave the war its name, two weapon systems played key roles: the Redeye and the MILAN.

The Redeye anti-aircraft missile ceased production in 1971 and had long been obsolete by 1987. It was a portable, disposable, heat-

seeking system with a range of 2,000 metres that best suited it to selecting targets from behind, such as retaliatory missile strikes against aircraft that had just dropped their payload.

MILAN (short for 'light armoured missile system' in

French) dated from 1972. It consisted of a launcher and a wire-guided missile. It had a range of up to 3,000 metres and proved reasonably effective against tanks in 1987. The system was later also employed in Iraq, Syria and Ukraine.



It's a crazy idea: an army of pickup trucks manned by untrained people from the most primitive parts of the southern Sahara takes on a Soviet-equipped army with tanks and rocket artillery. The so-called Toyota War is one of the strangest conflicts in post-war history.

The driver of the conflict was Libyan dictator Muammar Gaddafi, who had taken power in Libya in 1969. Gaddafi tried to take on the role of a unifying force for both North Africa and the Middle East, and in the polarisation of the Cold War, he ended up on the Soviet side, backed by a steady stream of Soviet military equipment. In the late 1970s, Gaddafi discovered the Aouzou Strip in northern Chad. It was a 100-km-wide band of desert said to contain rich uranium deposits, and no one seemed to be able to prevent Gaddafi from occupying it.

In 1978, Libya invaded Chad in the first of four similar invasions (1978, 1979, 1981 and 1983). Gaddafi briefly occupied the entire country but abandoned

the attempt when he realised that Chad's leaders had no desire to become Libyans. It was also clear that France and the US would not accept Gaddafi doubling the size of his territory. Even though France supported Chad with nothing more than a few foreign legionnaires and a few dozen SEPECAT Jaguar attack aircraft in N'djamena, it was enough to make the Libyans back down. Under no circumstances did Gaddafi want to come into conflict with a Western country.

**TALKING ABOUT 'INVASIONS'** is also a serious oversimplification. More accurately, the Libyans intervened in Chad's never-ending civil war. And there's no room here to recount all the twists and turns. Eventually, the skilful strategist and diplomat Hissène Habré emerged as Chad's Western-backed leader of the FANT coalition.

The fighting had raged back and forth across the vast expanse of Chad, following its sparse road ▶



ANTONIO MILENA/AGÊNCIA BRASIL

**Dictator Gaddafi's goal was to annex the Aouzou Strip and subjugate Chad.**



Chad's army gained unexpected mobility by bolting one or more heavy weapons to the beds of Toyota pickup trucks. Here, trucks have been fitted with Chinese Type 63 rocket artillery and Soviet ZPU-1 and ZU-23-2 anti-aircraft machine guns.

AFP/RITZAU SCANPIX



# THE TOYOTA WAR

► network. The armies fighting each other weren't huge – usually fewer than ten thousand men on each side. Libya fought with its own regular soldiers, allied tribal fighters and the Islamic Pan-African Legion, a multinational force of mercenaries and volunteers. In a war packed with incompetent military units, the Islamic Legion still managed to make its hallmark one of extraordinary ineptitude.

**THE LIBYAN ARMY**, cumbersome as it was, could roll around and do as it pleased in the desert. It employed T-55 and T-62 tanks, BMP-1 anti-tank vehicles and was supported by rocket artillery, howitzers and attack aircraft and helicopters. Local forces provided reconnaissance and there was pretty much a single type of battle. If they encountered resistance, Libyan forces launched slow, unimaginative frontal attacks. Since FANT's fighters had no anti-tank weapons, they were killed before any close combat could take place. This was despite the embarrassingly poor accuracy of Libyan artillery and attack aircraft.

One of Libya's many problems was that Gaddafi was terrified of uprisings and refused to allow the units in Chad to be properly organised. He also limited its training so that the army would not become too competent. Ultimately, what the Libyans became very good at was transporting food and fuel to their troops half a continent away from Tripoli. The Libyan soldiers never went short: "There was always milk with the coffee" was a popular refrain.

From a Cold War perspective, the conflict in Chad was of minimal importance. At the same time,

Gaddafi's Islamic Pan-African Legion consisted mainly of foreign soldiers.



GYSEMBERGH BENOIT/PARIS MATCH/GETTY

## “GADDAFI REFUSED TO ALLOW THE UNITS IN CHAD TO BE PROPERLY ORGANISED”

the US and Ronald Reagan became increasingly frustrated with Gaddafi and began to provide FANT with weapons, training and logistical support. Habré quickly realised how to cherry pick the most useful bits of aid offered. As he saw it, there was no point in trying to teach tribal fighters how to use tanks and artillery support. Instead, he asked for armoured cars, pickup trucks and light portable weapons – in particular, the Redeye anti-aircraft missile and the French MILAN anti-tank missile.

**THE MOST EFFECTIVE** armoured vehicle of the coming war would be the Toyota pickup – either the Hilux or the Landcruiser. These were two different four-wheel-drive predecessors of what we now call an urban pickup. Both had a flatbed at the back, good off-road capability, were easy to handle and anyone could learn to drive one. And it was possible to weld just about anything to either body. Anti-tank guns, stands for machine guns and even portable missile systems could be placed there.

In addition to between 400 and 500 Toyota pickups, FANT received around 70 armoured cars. But the French Panhard AML and US V-150 were difficult to maintain and even more difficult to learn to fight with. The missile systems they were provided with, however, were easy to master. An untrained soldier could, under the supervision of a foreign legionnaire, learn how to set up the platform, fire a few shots with a simulator and grasp the basics – and then pass it on. This concept will be well known to any army reservists who've spent a day with similar portable missile systems, which is why many have been deployed to Ukraine since the Russian invasion in 2022.

It should be added that accuracy and competency aren't necessarily important – Chad's tribal warriors performed terribly with their new weapons, but the mere fact that these weapons existed had a disproportionate effect in terms of deterrence: occasional misses with Redeye missiles were enough to prevent the Libyan air force from venturing anywhere near combat zones.

**IN FEBRUARY 1986**, Libya launched a new invasion of central Chad; 5,000 Libyan soldiers supported by 5,000 natives travelled south. Advancing nearly 200 kilometres, the force captured ►





A Chadian soldier from FANT with Soviet anti-tank missiles on his way to meet Libyan forces at Ouadi Doum in 1987.

## Chad – overlooked and in crisis

★ Before Chad was conquered by France in the late 1880s, it had long been part of the Bornu Empire, which ruled over trans-Saharan trade. In 1960, Chad gained independence and the country's first president quickly introduced a one-party system, triggering a slow-burning civil war that rolled on while the country descended into anarchy.

Chad occupies an area of 1,284,000 km<sup>2</sup>, making it the world's 20th largest country in terms of land mass. It had

just over five million inhabitants in the 1980s. Broadly speaking, the northern two thirds is desert with a Muslim population, and the southern third is savannah and Christian. The capital N'djamena, with 400,000 inhabitants, is in the south-west of the country. The population consists of around 200 different ethnic groups. The main languages are French and Arabic.

By comparison, Libya is even larger than Chad at 1,759,541 km<sup>2</sup>, and in

the 1980s had just over three million inhabitants. Apart from the fact that Chad could barely be considered a state, Chad and Libya were absurdly different. In the mid-1980s, Libya had 70 times the GDP per capita of Chad and two thirds of Libyans were literate, compared to around 15% in Chad. Chad had virtually no doctors, no electricity supply and no telephone network. It was one of the most severely underdeveloped countries in the world.



# THE TOYOTA WAR

DOMINIQUE FAGET/AFP/RETNAUSCANPIX

The Libyan army was equipped with far more modern weaponry than the Chadian army. But neither its artillery nor the air force made proper use of their technological advantage – like this Czechoslovakian L-39 Albatros attack aircraft.



► both Oum Chalouba and Bir Kalait. This time round, however, FANT counter-attacked, taking back both towns and forcing the Libyans to retreat – almost in disarray – to the Aouzou Strip. Few eyebrows around the world were raised by the fighting.

**THE SETBACKS CONVINCED** Gaddafi that he had deployed too weak a force. During the summer, Libyan forces were reinforced in the Aouzou Strip. They also attacked their former allies in the Tibesti region of north-west Chad. These natives didn't have access to FANT's modern weapons, so the Libyans were victorious almost by default. Habré sent help, but the mountainous terrain didn't favour his new weapons. The fighting would simmer for a year – just another low-intensity chapter in a low-intensity war that tied up a third of Libyan forces in Chad.

At the start of 1987, there were 8,000 regular Libyan soldiers and about 300 tanks in Chad, divided into Group South, fighting in Tibesti, and Group East, grouped around Faya-Lagreau, the centre of northern Chad, about 400 kilometres from the Libyan border. Operations were directed from Ouadi Doum, 200 kilometres closer to Libya.

In the new year, Habré's fighters headed north. Led by Hassan Djamous, FANT attacked Fada, a provincial capital about 400 kilometres from the Libyan border. It was defended by 1,200 well-entrenched Libyan soldiers supported by numerous

## “THEY DROVE WITH RECKLESS ABANDON BEHIND AND BETWEEN THE LIBYAN UNITS”

tanks and artillery. Djamous's 3,000 or so fighters attacked in wide arcs around the city, spreading panic among Libyans. Eight hours later, 800 Libyans had been killed and nearly 100 armoured vehicles destroyed. The surviving Libyans fled northwards, pursued by Toyota pickups. Djamous attacked a dug-in armoured unit and completely obliterated it – an almost unimaginable victory for the loss of three pickups and fewer than 50 men. The only outside help he'd received was a couple of French air strikes on Ouadi Doum to keep the Libyan air force occupied.

**IT'S IMPORTANT TO** remember that exceptional military success requires not only that the victor be reasonably competent, but that the enemy is grossly incompetent, too. During the first four invasions, the Libyan army had taken advantage of the fact that it was unstoppable no matter how poorly it performed. But now everything had changed. And what had happened?

The weapons from the West hadn't transformed FANT into a super-army, but they gave its fighters



confidence. And the fast, mobile and messy Toyota way of fighting suited them. They drove with reckless abandon behind and between the Libyan units, and so long as they drove fast enough, the armoured vehicles couldn't even swing their turrets quickly enough to take aim. FANT managed to create a situation that suited its fighters' mindset, while the same situation was almost unmanageable for the Libyans. You could say that FANT's fighters thrived on the chaos they created. It's worth mentioning that compared to today's fighting in Ukraine, where modern Western weapons have caused Russia enormous losses, the differences in this war were more in the minds of the combatants. Both sides' crews were terrible at maintaining and using their equipment. On FANT's side, repairs and logistics were handled by the French. In the Libyan army, nobody repaired anything. Neither side looked after vehicles and equipment.

**GADDAFI REALISED THAT** one of his battle groups had been wiped out in a matter of hours and his response was to send new units south. He did nothing about the confused command structures in Chad. And gave no orders on how to respond to FANT's new tactics.

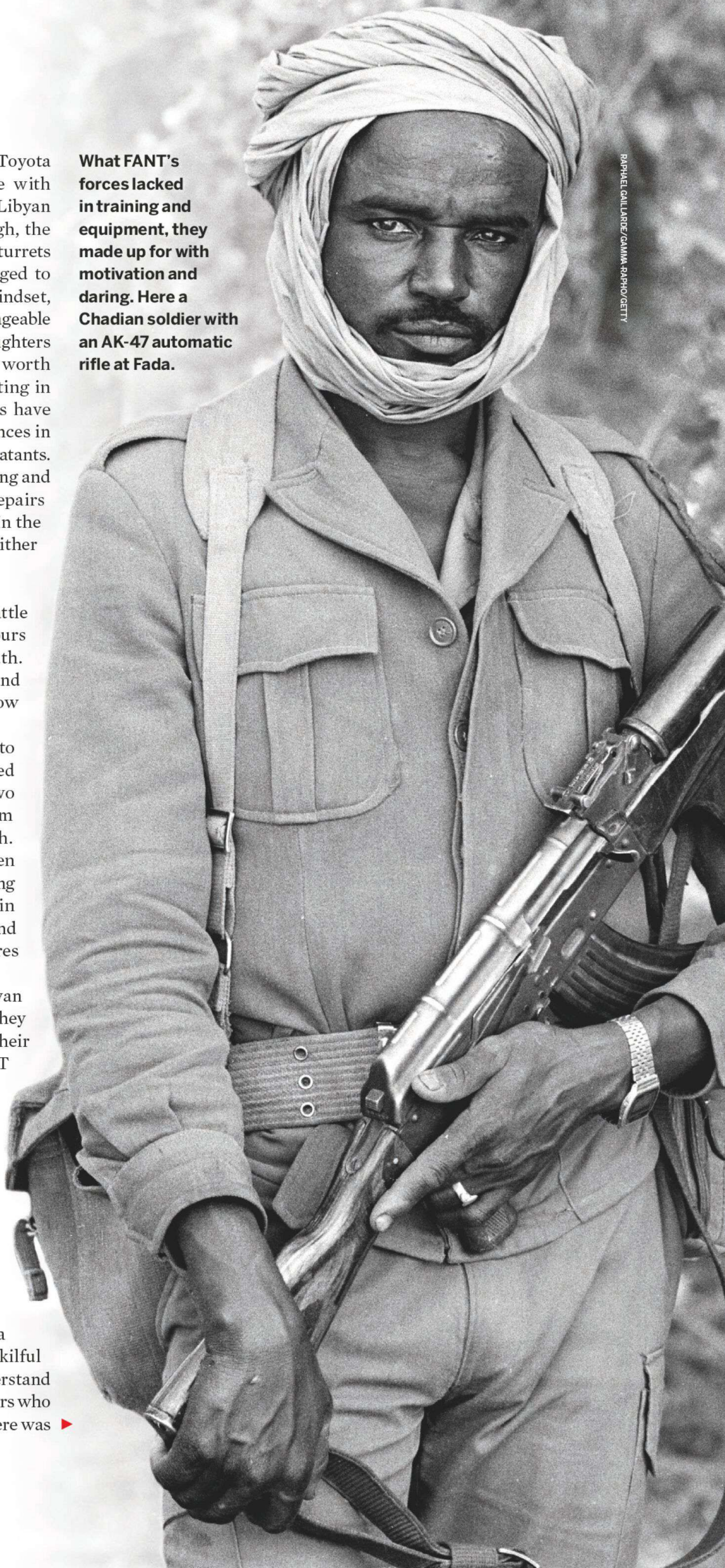
As they waited for their French friends to arrive in Fada, FANT's commanders pondered what to do next. In front of them were two concentrations of Libyan units: at Ouadi Doum in the north and Faya-Lagreau in the south. They decided to attack Ouadi Doum even though it was better defended. Their reasoning was, if that base was taken, the Libyans in Faya-Lagreau would be cut off from Libya and forced to retreat across hundreds of kilometres of desert.

Ouadi Doum was defended by 6,000 Libyan soldiers backed by 250 armoured vehicles. They had attack helicopters and artillery inside their defence ring. To improve the odds, FANT began making small raids on the base to provoke a Libyan offensive against Fada. They succeeded, and on the way to Fada, 1,500 Libyan soldiers walked into a series of ambushes at Bir Kora. The following night, FANT engaged a second Libyan force sent to relieve the first.

FANT's losses were again minimal. The Libyan units lost over 800 men and around 80 vehicles. These vehicles would be mostly left in the desert – even if they'd simply been abandoned. FANT's soldiers had no idea what to do with them. But it was a bold and skilful operation, and in retrospect it's hard to understand how Hassan Djamous managed to lead fighters who couldn't read maps or even use radios. But there was ►

**What FANT's forces lacked in training and equipment, they made up for with motivation and daring. Here a Chadian soldier with an AK-47 automatic rifle at Fada.**

RAFAEL GALLARDE/GAMMA-RAPHO/GETTY





# THE TOYOTA WAR

► no doubt that Djamous was a natural when it came to mobile warfare. There were jokes among Chad's Western advisers about "the black Rommel".

**AT THE END** of March, Djamous and nearly 3,000 fighters set off for Ouadi Doum. The Libyans soon realised they were surrounded, but did little about it, while the FANT fighters scouted their positions. On 22nd March, an attack was launched. The fighters managed to break through the Libyan defence ring and then ran amok. The Libyan artillery failed to fire a single shell throughout the battle and after four hours the base was lost. A counter-attack was attempted the next day, but the ham-fisted attack didn't stand a chance. The Libyans suffered a further 1,300 casualties, plus had 500 men captured along with huge amounts of materiel. This included four Mi-24 attack helicopters and several modern anti-aircraft systems. Djamous had lost 30 men.

The Libyan forces in Chad retreated in turmoil and once again Gaddafi sent fresh reinforcements. During a pause of almost six months, more than 13,000 men, a third of the Libyan army, were concentrated in the Aouzou Strip. The conflict's final phase began in July 1987 with several small FANT attacks. Libya had lost

control of the Tibesti highlands and in August, while trying to regain them, a 3,000-strong battle group was attacked at Oumchi. The Toyota pickups were everywhere, and it was clear that the Libyans had learned nothing. The retreat from Oumchi triggered a general exodus and on 8th August, Djamous took the main settlement on the Aouzou Strip: Aouzou Oasis.

**IN AUGUST, LIBYA** attempted to retake Aouzou. The offensive was led by Ali ash-Sharif, considered to be Libya's sharpest general. He failed to adapt in any way to how FANT fought, but instead tried to solve all problems with more firepower. Artillery and attack aircraft were used against the small town, but despite this, the first two attempts to storm it failed. The sluggish attacks were torn apart by rapid counter-attacks. In a third attack on 28th August, when ash-Sharif used almost absurdly excessive force, the town was finally taken, but it was barely noticed that it was almost undefended. Habré had pulled out Djamous and his best fighters to prepare a new offensive. Into Libya.

In early September, both sides attacked. The Libyans sent 3,000 troops towards Ouninga



**Hissène Habré committed several crimes against humanity while dictator of Chad.**





Kebir, while Djamous managed to sneak almost 200 kilometres across the border to attack the Maatan as-Sarra maintenance base in Libya itself. On 5th September, a botched attack on Ouninga Kebir was stopped and on the same day, Djamous attacked Maatan as-Sarra. He and his fighters displaced 2,500 men and destroyed large amounts of equipment, aircraft and armoured vehicles before disappearing into the desert again.

**HOWEVER, THE ATTACK** into Libya had been too successful. Now Paris stepped in and forced Habré to agree to a ceasefire. In the fighting, Libya had lost nearly 8,000 men and 800 armoured vehicles. It also lost other materiel worth huge amounts of money. In total, FANT is said to have lost around 1,000 soldiers. After the ceasefire, the dictators of both countries began to focus on other affairs.

The Toyota War is an almost unknown part of post-war military history. But there is much to learn about mobile warfare and the importance of seizing and maintaining the initiative. And the fact that all the modern equipment in the world won't get you anywhere if you can't use it. There is again

## “DJAMOUS MANAGED TO SNEAK ALMOST 200 KM ACROSS THE BORDER”

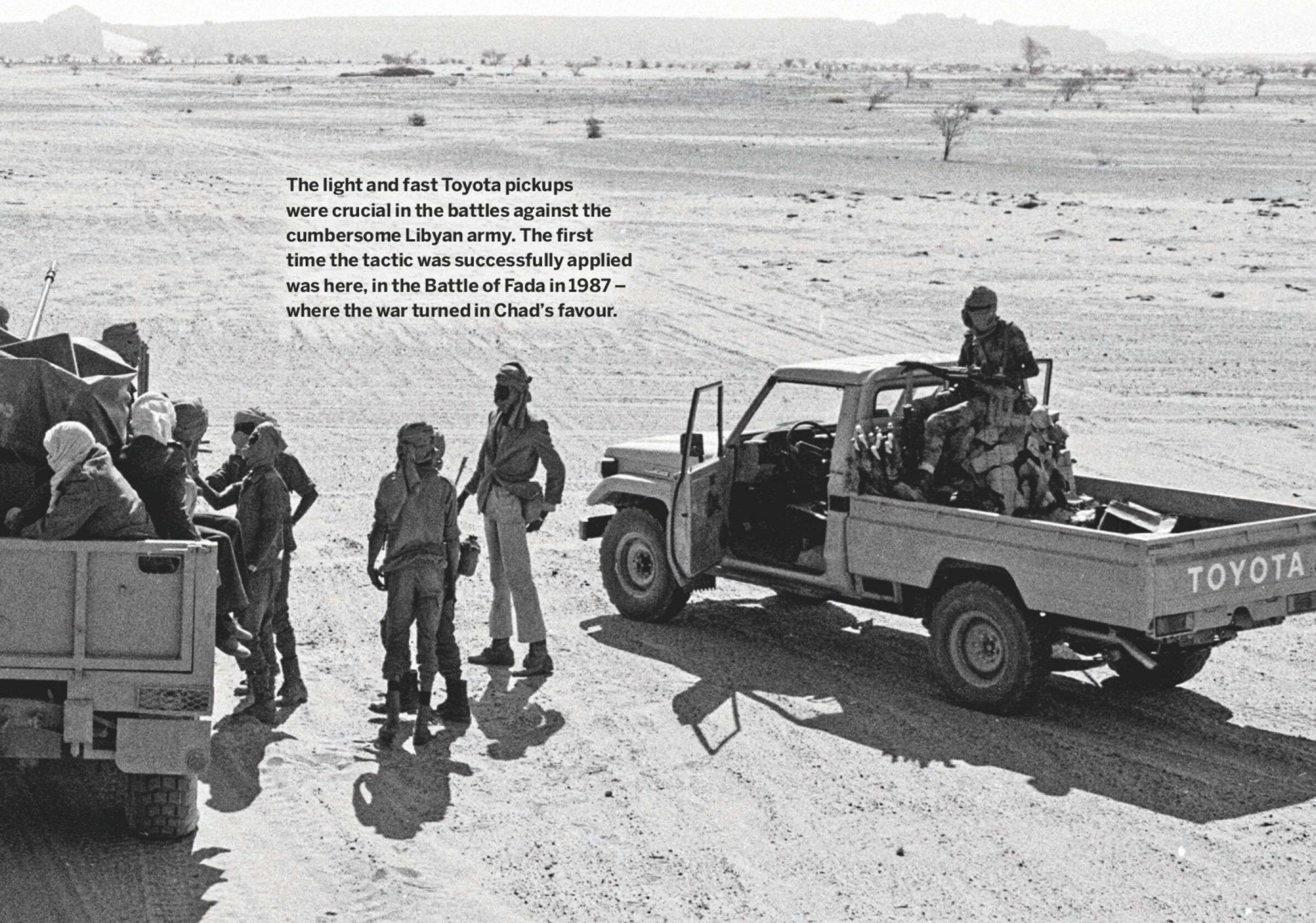
a parallel to a current conflict, where Ukrainian units are better at using Russian equipment than the Russians themselves.

Gaddafi's fate is well known. Habré had Hassan Djamous executed in 1989. Habré himself was a tyrant with an almost sadistic streak, and after he was forced into exile by a military coup in 1990, worse and worse abuses were revealed, from ethnic cleansing to institutionalised torture and sexual abuse. Moreover, Habré himself had been an active participant in the abuses – a fact known to both the US and France.

After many twists and turns, Habré was prosecuted in 2007 in Senegal for crimes against humanity. He was sentenced to life imprisonment and died of COVID-19 in 2021. ★

**Anders Fager** is a military history writer and author.

The light and fast Toyota pickups were crucial in the battles against the cumbersome Libyan army. The first time the tactic was successfully applied was here, in the Battle of Fada in 1987 – where the war turned in Chad's favour.





**Gulf War 1990-91**

# OPERATION DESERT STORM

The conflict between Saddam Hussein's Iraq and the allied coalition led by the United States was the first live-broadcast high-tech war in history. The US, in particular, was surprised by its own successes.

Text: **ANDERS FAGER**







The oil wells of the Burgan field in south-eastern Kuwait burn over the horizon behind a US Humvee.

ALLAN TANNENBAUM/GETTY





On 2nd August 1990, news reached the Western world that Iraq had attacked the tiny country of Kuwait. The author of this article, like most people in Europe, had only a vague idea of where the country was and why Saddam Hussein would invade it. The picture would soon become clearer as we watched what became the first war to be broadcast live on TV.

The background to the Gulf War, like many conflicts in the Middle East, is complex. It involves the Ottoman Empire, European colonial powers, the Cold War, the discord between Israel and the Arab world, and the enmity between Sunni and Shia Muslims. Kuwait, which in the 1980s accounted for a tenth of the world's oil production, is a little smaller than Wales. It had two million inhabitants, a fifth of whom were Palestinian migrant workers. The country was ruled in 1990 by Emir Jaber Al-Ahmad Al-Sabah, the 13th in his dynasty. He ruled Kuwait with almost unlimited power, possessed unimaginable wealth and had 41 children with an unknown number of wives.

**IF THE EMIR** of Kuwait had a touch of the *Arabian Nights* about him, the ruler of Iraq was an archetypical dictator who had emerged in the wake of decolonisation. Saddam Hussein was reported to have been given his first gun when he was ten. Legend has it that he shot one of his teachers shortly afterwards.

As a young man, he joined the Socialist Ba'ath Party and, after many twists and turns, became Iraq's leader. In the early 1970s, he nationalised the country's oil resources, and the proceeds paid for social reforms that made him popular with the people. When he became president in 1979, he sat in front of rolling cameras and smilingly pointed out

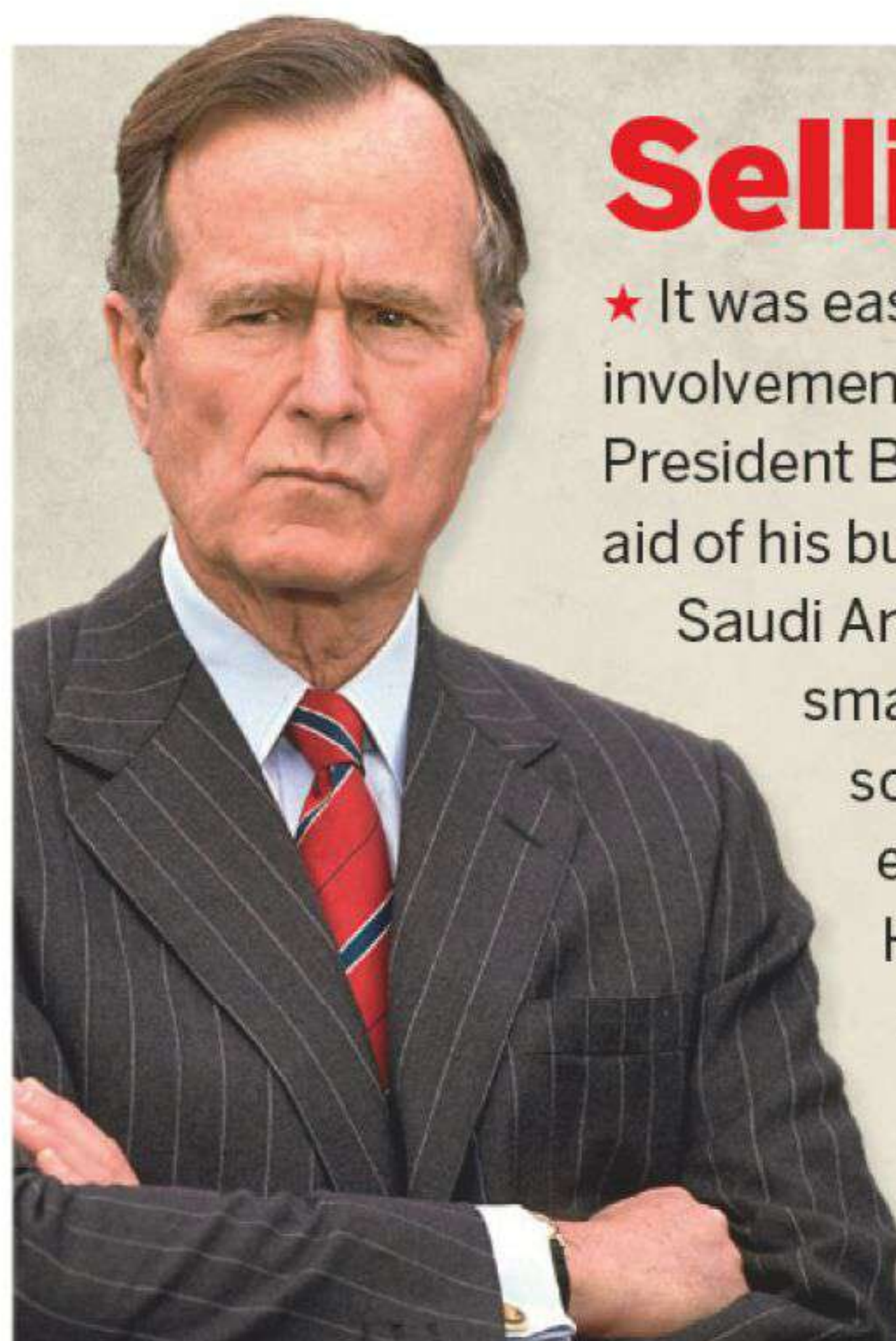
which members should be taken out of parliament and executed.

The US and Iraq's relationship was complicated. Iraq had participated in the wars against Israel and ended up on the Soviet Union's side in the Cold War. But in 1978, revolution broke out in previously US-friendly Iran and the country's new leaders identified the US as the main enemy. Hoping to capitalise on the mess in Iran, Saddam Hussein launched an eight-year war in 1980. The US initially stayed out of it, but over time Iraq was allowed to buy lots of American weapons, paid for with money from Saudi Arabia and Kuwait. The Sunni oil emirates were happy to finance Iraq's war against Shia Iran. Saddam Hussein also used chemical weapons against Iran, weapons he created with Western European technology. But because the US was happy to let him keep the 'bad guys' in line, he got away with both that and using the weapons against his country's Kurdish minority.

**THE WAR COST** over a million lives and left Iraq heavily in debt. Saudi Arabia had promised money, but got tangled up with OPEC (Organisation of Petroleum Exporting Countries) and its tiny neighbour Kuwait. Iraq tried to repay the debt with income from oil sales, but prices were falling. The price drop was partly due to the fact that a lot of OPEC countries were producing more oil than agreed. Iraq was in a bind. It needed to sell oil to pay its debts, but the countries it owed money to were lowering the price of oil. As Saddam Hussein saw it, OPEC was on the side of the small emirates.

He brought up an old dispute with Kuwait over the Rumaila oil field and claimed that all of Kuwait should belong to Iraq, because both countries had been part of the Basra Province in the Ottoman Empire. In July 1990, he threatened military intervention. At the same time, he hardened his

**George H W Bush hesitated to send troops to Kuwait.**



DIANA WALKER/GETTY

## Selling the war to the public

★ It was easy to perceive the US involvement in Kuwait merely as President Bush coming to the aid of his business associates in Saudi Arabia; all that talk of small state sovereignty sounded hollow. Not even the fact that Hussein was an almost cartoonish despot with a deplorable lack of respect for

human rights helped. Western leaders and militaries looked awkward in the media, as if remembering how the Vietnam War had been portrayed.

And they lied. For example, a film about Iraqi abuses in Kuwait turned out to be made by a US advertising agency and paid for by the Kuwaiti government-in-exile. A woman who spoke in the film about the horrific killings of newborn

babies by Iraqi soldiers turned out to be a member of the Kuwaiti royal family and hadn't set foot in the country for years.

In the US, 'porn king' Larry Flynt became one of the most vocal critics of support for Kuwait. Why, he asked, should black American soldiers fight for a regime that did not even consider them human? And why should American women do the same?



## “SADDAM HUSSEIN WAS SAID TO HAVE BEEN GIVEN HIS FIRST GUN WHEN HE WAS TEN”

tone towards other Arab countries, accusing them of following the lead of Israel and the United States. There were calls in the Arab world for Saddam Hussein to be overthrown, or at least to apologise and change his behaviour. Syrian President Hafez al-Assad threatened to bomb Iraq.

Meanwhile, Egyptian President Hosni Mubarak tried to mediate and George Bush, who had succeeded Reagan as US president in January 1989, tried to familiarise himself with the situation. He already had his hands full with a large budget deficit and a new world order that was no longer bipolar. Bush had also been historically involved with the US and Arab oil industries, which would become a liability in the coming year.

**ON 25TH JULY,** Saddam Hussein had a long meeting with US Ambassador April Glaspie. He criticised the way the US was holding Kuwait and other oil states to ransom while driving Iraq to bankruptcy. Was this the thanks he got for years of war with Iran? Glaspie explained that the US wanted inter-Arab conflicts to be resolved by peaceful means. There are different interpretations of the meeting. Some say that Glaspie (who spent half her diplomatic life in the Arab world) unwittingly led Saddam Hussein to believe that the US would stay out of a military conflict. At the same time, she was convinced after the meeting that there was no immediate threat to Kuwait.

**TWO DAYS EARLIER,** on 23rd July, the CIA had reported that Iraq had concentrated over 30,000 Republican Guard troops on the border with Kuwait. The Guard was an autonomous force outside the regular army. An elite body, in terms of reliability, training and equipment.

Overall, the Iraqi army in 1990 was one of the largest in the world (with nearly one million men and three quarters of a million reservists). Moreover, it was both combat-experienced and equipped with relatively modern equipment from ►

**Saddam Hussein practises with a Soviet rocket launcher during the war against Iran.**





## GULF WAR

- ▶ both the East and the West, including 5,500 tanks and 550 aircraft.

On 31st July, Iraqi and Kuwaiti representatives met in Saudi Arabia, where Iraq demanded \$10 billion in compensation from Kuwait. In turn, Kuwait made a counter-offer of \$500 million. That was as far it got. Saddam Hussein secretly ordered the invasion of Kuwait.

**SADDAM HUSSEIN PREPARED** nearly 100,000 troops to move against Kuwait. In the Persian Gulf, the US Navy raised its state of alert, but in Kuwait, Emir Al-Sabah said the threat was exaggerated. However, Kuwait should have been worried. Its small, poorly trained forces numbered 16,000 men and a mere 80 aircraft compared to Iraq's 550.

On the evening of 1st August 1990, Iraqi special forces entered Kuwait to prepare routes for the regular troops. At the same time, tentative orders were finally given in Kuwait to raise readiness levels. At midnight, the Iraqi army attacked on two fronts. The main assault went along the highway from Basra directly south towards Kuwait City, while a more westerly attack made a detour south of the city. Iraq deployed its four main Republican Guard divisions (two armoured and two mechanised) and one division of army units.

In the early morning of 2nd August, fighting broke out west of Kuwait City and the Kuwaiti Air Force sent up a single aircraft that never returned. Meanwhile, Iraqi commandos began landing in Kuwait City harbour. In the morning, the Kuwaiti Army managed to form a defence line on the outskirts of Kuwait City, but this was useless against Iraq's enormous advantage. In fighting that is still difficult to piece together, the emir's palace and the city's airport fell. One of the emir's half-brothers was killed in the fighting at the palace, while the emir himself, members of his family and government fled south to Saudi Arabia in a caravan of private cars that narrowly avoided the Iraqi attempt to encircle Kuwait City.

**BY THE AFTERNOON**, the war was decided, though it took a few more days for the Iraqis to gain control of the situation. Apart from one brigade that



escaped to Saudi Arabia, most of the Kuwaiti Army was captured. The losses were telling: almost 300 Iraqis were killed, compared to 600 Kuwaitis. In Kuwait City, widespread looting began. People were executed in the streets in front of rolling cameras and the images broadcast around the world. In what was to be the first major media war, Saddam Hussein became known only for his violence. To him, it was appropriate to show the world how his soldiers were abusing civilians, while proclaiming that Kuwait was now Iraq's 19th province.

**IN THE US**, President Bush was discussing what to do about Saddam Hussein when he learned of the

### Coalition was an international assortment

★ The 38 member states of the coalition included:

**Africa:** Egypt, Morocco, Niger, Senegal.

**Asia and Oceania:** Australia, Bangladesh, Philippines, Malaysia,

New Zealand, Pakistan, South Korea.

**Europe:** Belgium, Denmark, France, Italy, Greece, Netherlands, Norway, Poland, Portugal, Spain, Romania, United Kingdom and Northern Ireland, Sweden,

Czechoslovakia, Turkey, Hungary.

**Middle East:** Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates.

**North America:** Canada, USA.

**South America:** Argentina, Honduras.





Marines exit a CH-46E Sea Knight helicopter during Imminent Thunder, a Marine Corps operation during Operation Desert Shield.

attack. Suddenly the dictator controlled one fifth of the world's oil resources. There were differing opinions about what to do: negotiate or impose sanctions? The first to take a hard line against Saddam Hussein was British Prime Minister Margaret Thatcher. Drawing parallels with the appeasement of Hitler, she pointed out that Saddam Hussein could easily let his army roll on into Saudi Arabia and seize another fifth of the world's oil. All that stood in his way was the Saudi Army, which was best known for buying expensive Western equipment that its men didn't know how to use.

**PRESIDENT BUSH HESITATED.** Under Reagan, the US had decided in principle to intervene militarily if Iran or Iraq threatened its neighbours. But faced with a *fait accompli*, there was less certainty. The war in Vietnam was fresh in his mind and Bush wanted to avoid at all costs a protracted major conflict in a foreign country.

The UN Security Council demanded that Iraq withdraw its forces and quickly imposed economic sanctions and a naval blockade. The Arab League also called for a withdrawal, even though Libya supported Iraq, and several states demanded that the

## “PEOPLE WERE EXECUTED IN THE STREET IN FRONT OF ROLLING CAMERAS”

conflict be resolved without Western interference. Saddam Hussein had probably hoped that would be it. He announced that he would consider leaving Kuwait if “all cases of occupation ... in the region be resolved simultaneously”, implying that Israel had to leave its occupied territories, something he knew it would never agree to.

**SUDDENLY, SAUDI ARABIA** agreed to receive military assistance from the West. Many in the Arab world thought it was shameful to allow Westerners into the country to protect the holy sites of Islam, but the criticism was silenced and what would soon be known as Operation Desert Shield began. The first US aircraft landed in Saudi Arabia on 8th August. The military build-up in Saudi Arabia would grow into the largest troop movement since World War II, with scores of ships, troops and aircraft pouring ►



US troops made up the majority of the coalition force, almost 700,000 troops in total.



► into the country. Over 500 ships and 10,000 flights would carry more than half a million soldiers, nearly 140,000 vehicles and an almost unimaginable amount of equipment over the next few months. At times, 5,000 new troops a day were arriving in Saudi Arabia, and it took only a few weeks before the immediate threat of invasion was averted.

**IT IS UNCLEAR** whether Saddam Hussein had seriously considered invading Saudi Arabia, but with the possibility gone, nearly a quarter of a million Iraqi soldiers were instead ordered to begin preparations to defend his new province. Two dozen infantry divisions were to defend the border, and improbable numbers of mines were laid,

## “THE IRAQI ARMY WAS LARGE, WELL PREPARED AND HAD QUITE MODERN EQUIPMENT”

and defences dug. Kilometre-long trenches were to be filled with oil and ignited. And behind the entrenchments, the Republican Guard was ready to counter-attack. Saddam Hussein let the US know that he had access to chemical weapons and that if attacked, it would be the “mother of all battles”.

Meanwhile, the US set about establishing the largest military coalition since World War II. It





was a powerful signing of pacts large and small: Argentina sent a destroyer and the Muslim country of Niger contributed 600 soldiers to guard Saudi Arabia's holy sites, while Britain sent 45,400 troops, including one of the world's most modernised armoured units, the largest force after that of the US and Saudi Arabia. Afghanistan contributed a few hundred men, and Syria and Iran, which were not the best of friends with the US, also helped out. Saudi Arabia and Kuwaiti exiles contributed more than half of the \$60 billion cost of the war. Israel stayed out of the coalition to make it possible in the first place. Japan and newly reunited Germany did not send troops, but donated money. At the end of September, the Soviet Union also gave its approval

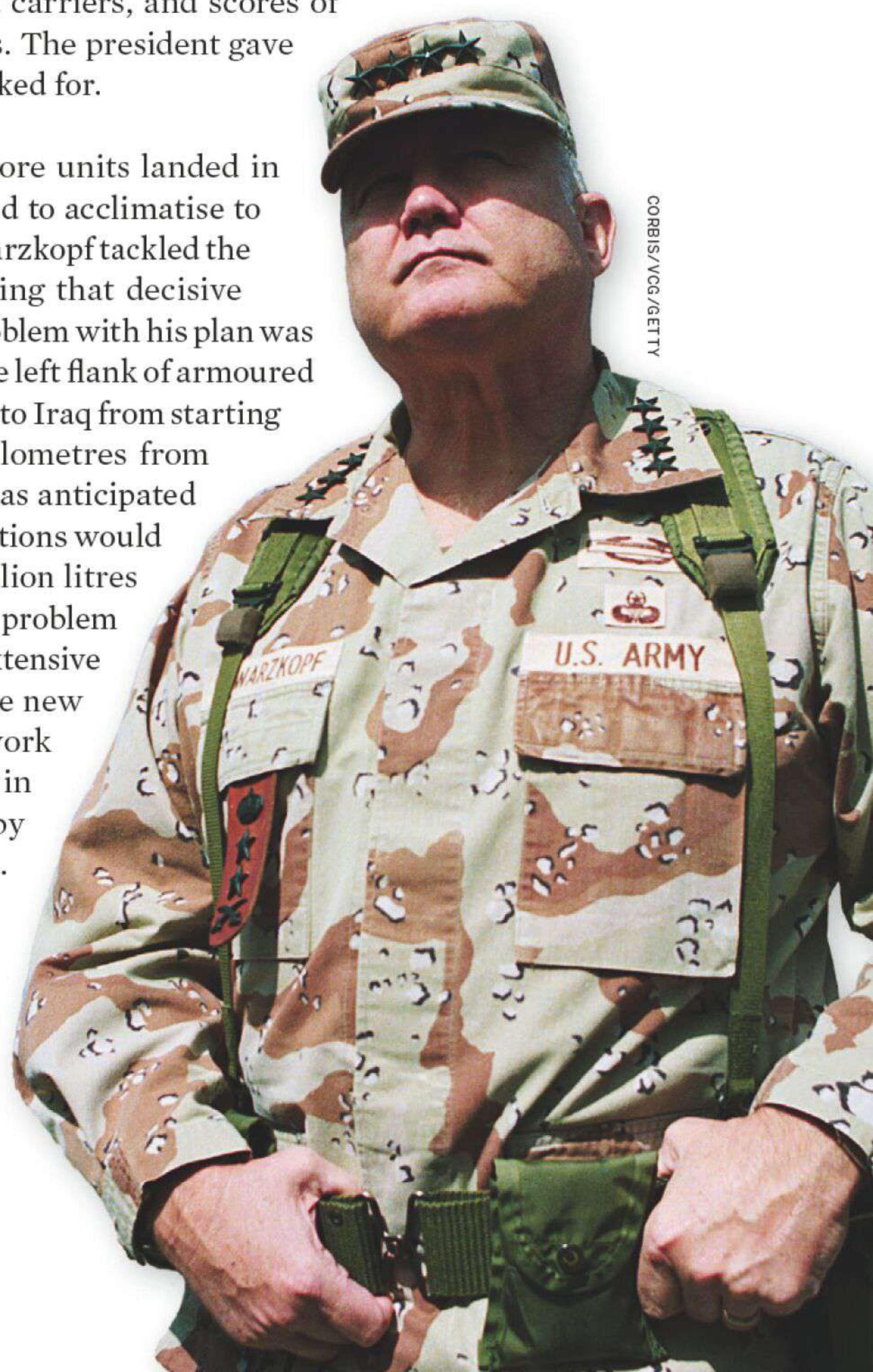
to the intervention. Saddam Hussein had united the old arch-enemies.

**GENERAL NORMAN SCHWARZKOPF**, a 57-year-old Vietnam veteran who had also been involved in the US invasion of Grenada, was put in charge of the forces in Saudi Arabia. He was a workhorse who liked to play it safe and, like his president, was influenced by the spectre of Vietnam. The USA's highly diplomatic commander-in-chief, Colin Powell, described him as full of "pyrotechnics and histrionics" – though they got on well.

In early September, once Schwarzkopf had put the defence of Saudi Arabia in order, he came up with a plan to recapture Kuwait. The task was achievable, but his staff reckoned that an attack would result in large-scale armoured strikes that could cost the coalition 10,000 men in casualties. The Iraqi army was large, well prepared and had quite modern equipment. It would put up stiff resistance to the coalition forces, who would be constantly short of ammunition and fuel. And then there was the threat of chemical weapons. Meanwhile, it was estimated that it would take five years for sanctions against Iraq to have any effect. Schwarzkopf was summoned to President Bush, who asked what he needed to secure a decisive victory. The general requested the US's two most heavily armed armoured divisions from Germany, half a dozen aircraft carriers, and scores of National Guard units. The president gave him everything he asked for.

**AS MORE AND** more units landed in Saudi Arabia and tried to acclimatise to the desert heat, Schwarzkopf tackled the tricky issue of securing that decisive victory. The major problem with his plan was how to supply his huge left flank of armoured units as they moved into Iraq from starting points nearly 400 kilometres from the nearest port. It was anticipated that the assault operations would consume over 40 million litres of fuel per day. So, the problem was addressed with extensive preparations. A whole new multi-lane road network was constructed in the desert, served by armadas of lorries. Civilian transport companies from countries such as Nigeria, Pakistan and Saudi Arabia contributed ►

**Norman Schwarzkopf was the commander of US forces in the Middle East.**







ANDREA POSEY

**Two American F-15C Eagles and a Saudi F-5E Tiger II provide air support to coalition ground forces.**

► thousands of lorries, and it was joked that although the coalition soldiers were united, there was a full-on war between the different countries' truck drivers. Would Saddam Hussein's "mother of all battles" be met with the mother of all traffic jams?

**EVERY SINGLE STATISTIC** in the supply operation was monumental. Keeping half a million soldiers supplied with water was a task of gigantic proportions. Repainting 65,000 vehicles from European to desert camouflage was another. By October, Saudi firms were delivering 600 latrines and 300 showers a day to coalition units.

Meanwhile, Saddam Hussein made new proposals. He was willing to leave Kuwait if he was given access to the oil fields in Rumaila. Or if sanctions were lifted. Or if all non-Muslim military personnel left Saudi Arabia. All of this was interspersed with criticism of Saudi Arabia for not being worthy enough to guard the holy sites of Islam. It became increasingly clear that the dictator did not believe that the world would engage in a major war over an insignificant country in the Persian Gulf. And that, when faced with the facts, he had no back-up plan other than to threaten the costliest war possible. Because the odds were becoming increasingly stacked against him.

Meanwhile, President Bush was struggling with domestic public opinion. A war that sacrificed blood for oil was not popular and the demonstrations in

## "THE IDEA WAS TO FORCE ISRAEL INTO THE WAR"

Washington were uncomfortably reminiscent of the protests during the Vietnam War. At the same time, Saddam Hussein announced that if attacked, he would deploy Scud missiles against targets in Israel. The idea was to force the country into the war and thus get the Arab states in the coalition to leave. He also made no secret of the fact that Iraq could arm its Scuds with chemical warheads. Israel responded to Saddam Hussein and the world with hints that it had nuclear weapons.

**THERE WAS DEADLOCK** and war seemed inevitable. On 9th January, the sides met in Geneva. Iraqi Foreign Minister Tariq Aziz complained that the coalition offered nothing. But it was not going to back down an inch. Aziz himself read out a message from Saddam Hussein. He wasn't going to back down either. Meanwhile, the US Congress voted by a narrow margin in favour of war. Orders were given to carry out Operation Desert Storm.

The evening of 16th January marked the end of six months of military preparations. Stealth bombers took off and behind them came swarms ►



# Smart weapons revolutionised warfare

★ The Gulf War was a breakthrough for smart weapons, a technology that had been around since the 1960s but had become devastatingly accurate thanks to improved guidance systems. The coalition was able to demonstrate that instead of indiscriminately dropping pathological amounts of bombs and shells, as in Vietnam, there was now a willingness to use precision strikes to minimise civilian casualties.

The Tomahawk and various guided bombs replaced armadas of B-52s. The Tomahawk's warhead was less than half a tonne and, in most cases, hit within a few metres of its target, while a B-52 dropped nearly 30 tonnes over half a square kilometre. (The precision strikes meant that Western journalists could broadcast

live from missile strikes on Baghdad, standing on their hotel balconies.) Even so, not even ten percent of the bombs dropped were guided. The choice of targets did much to limit the damage to civilians, as did the fact that the war was largely fought in a desert. Despite this, civilians fell victim to the bombing. Collateral damage was one of many new terms uttered in press conferences.

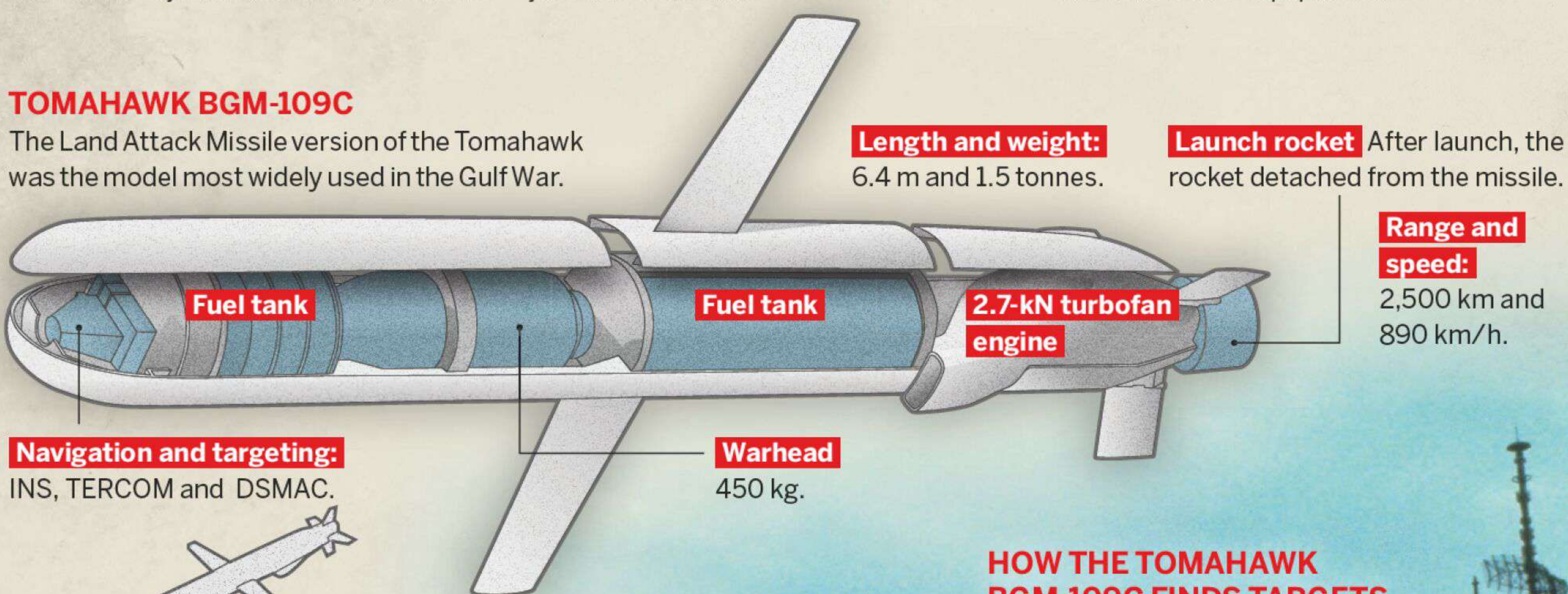
It was also clear that the Soviet anti-aircraft systems available to Iraq were unable to counter US stealth bombers. The ineffectiveness of these systems caused headaches in the Soviet Union, and Iraq also lost over 5,000 Soviet-built armoured vehicles in the conflict, while the coalition lost just over 60. It wasn't just that their tanks

were technically superior and their air support could attack enemy armoured vehicles without fear of anti-aircraft fire, but the weapons were used in optimal conditions: in open terrain against an enemy that could be fought at maximum range and could barely fire back.

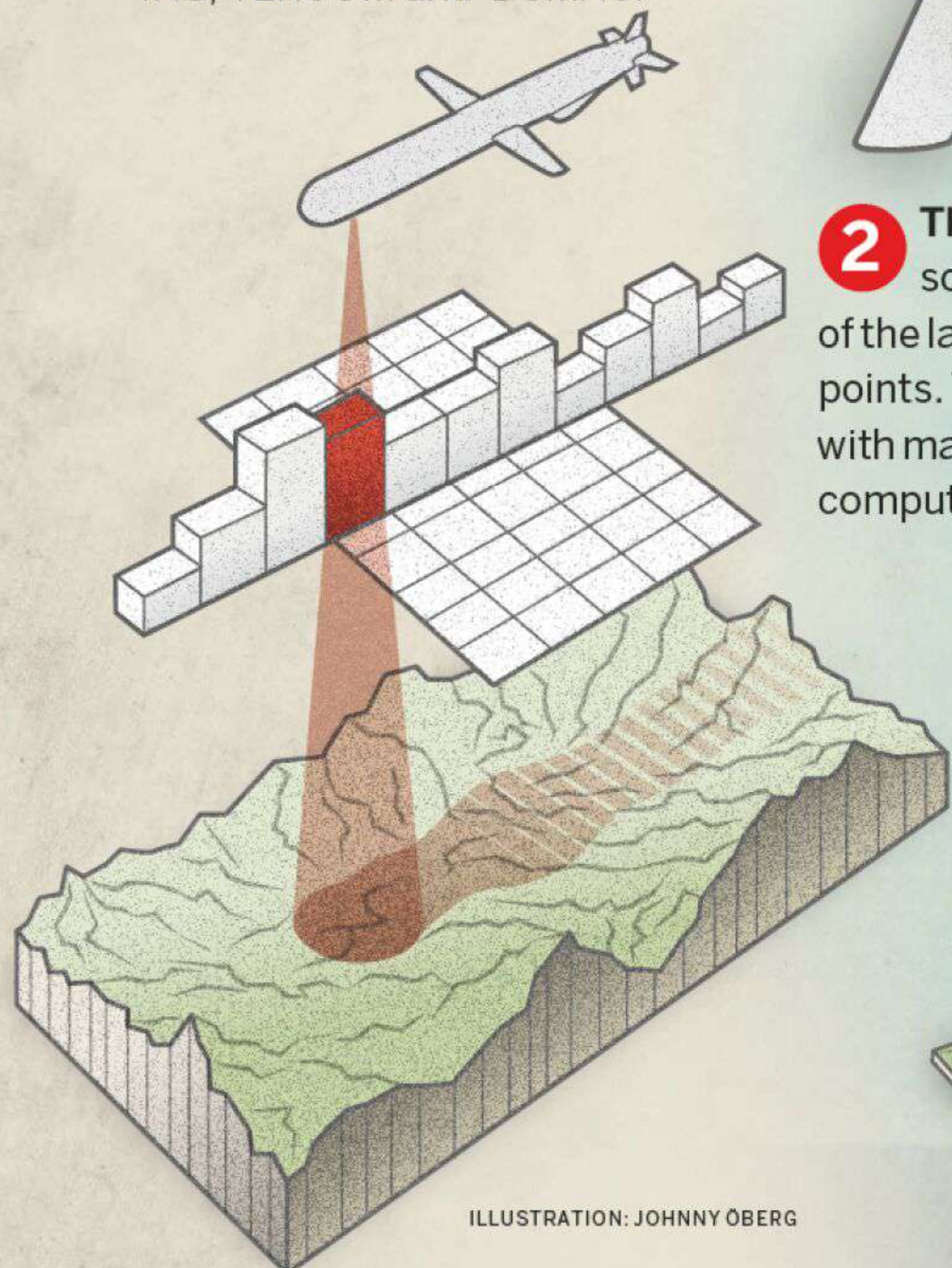
The war was said to be a revolution in combat and weapons technology. But many of the US systems that were touted as almost unbeatable had been used against an enemy that neither understood their capabilities nor had the tactics and techniques to minimise their impact. In the operations against Serbia a few years later, the same weapons failed to display the same superiority, even though they were up against much the same Soviet equipment.

## TOMAHAWK BGM-109C

The Land Attack Missile version of the Tomahawk was the model most widely used in the Gulf War.



**Navigation and targeting:** INS, TERCOM and DSMAC.



**2 TERCOM:** The missile scans the topography of the landscape at different points. The data is compared with map data in the missile's computer memory.



**3 DSMAC:** As the missile approaches its target, the DSMAC navigation system takes over and photographs the landscape. The images are compared with images of the target in computer memory.

## HOW THE TOMAHAWK BGM-109C FINDS TARGETS

**1 INS:** An inertial navigation system (calculating position based on speed) guides the missile towards land after it is launched from battleships such as the USS Wisconsin (pictured) in the Persian Gulf.

CORBIS/GETTY

ILLUSTRATION: JOHNNY ÖBERG





Iraqi tracer lights from anti-aircraft guns on 22nd February 1991 in Baghdad.

GETTY

► of cruise missiles and nearly 1,700 aircraft. At 01.00 on the 17th, attack helicopters knocked out radar stations in western Iraq. It was the start of a night of military brutality. Iraq's air defences were hit first by guided bombs from stealth bombers, then for the first time in history, by cruise missiles. With Iraq's air defences blinded, then came the attack aircraft. That night, a new kind of war was broadcast live to the world. The sky over Baghdad was a mass of tracer lights as the city's anti-aircraft batteries fired blindly, while journalists stood on their hotel balconies and filmed the unfolding scene.

**IN THE MORNING,** Iraqi radio announced that the mother of all battles had officially begun. The coalition reported that only one of its pilots had been killed. Little did its commanders realise that in five hours, Iraq's considerable air force and air defences, equipped with modern Soviet technology, had been completely wiped out.

Over the next few days, the coalition focused on the Iraqi command systems. They knew that Saddam Hussein, in typical dictator manner, micromanaged his troops and if he was isolated, his army would be paralysed. Constantly chased by cruise missiles, he was forced to change his command post incessantly and drove around alone in private cars. Meanwhile, the coalition searched for the type of cars they learned he was using. In television broadcasts, Saddam Hussein said the

British and Americans were cowards and would not stand a chance in hand-to-hand combat.

In total, 90,000 tonnes of bombs would fall on Iraq. During the war, the coalition would fly over 100,000 sorties and lose only 75 aircraft, 31 of them in accidents. The Iraqi Air Force had only one confirmed victory in air combat. Much later, it would also turn out that parts of the Iraqi Air Force had fled early on to arch-enemy Iran. The bombing avoided civilian targets, but Iraq's population suffered nonetheless as the attacks caused enormous damage to everything from roads and bridges to electricity supplies and TV stations. Four hundred civilians were killed in an attack on an air raid shelter. Iraq showed the images on TV and accused the coalition of indiscriminate attacks. The coalition countered by accusing Iraq of deliberately massing civilians around military targets.

**ON 18TH JANUARY,** the day after the air strikes began, Iraq fired the first Scud missiles at Israel. Several of them hit civilian targets and Israel immediately threatened retaliation. But President Bush urged the Israelis to exercise restraint, and sent weapons to combat the Scuds. The Patriot missiles fired to intercept the Scuds became a signature of the war, although in retrospect there is disagreement about their effectiveness. Fired at the limit of their range and countered by increasingly effective air defences, the attacks became more of



a weapon of terror that made for great TV clips. Despite their relative ineffectiveness, General Schwarzkopf was ordered to target the Scud launch pads, vehicles no bigger than trucks.

**A THIRD OF** all coalition air strikes against Iraq were directed at anything that even resembled Scud launch ramps. They were sometimes directed by special forces inside Iraqi territory. Iraq managed to launch a total of 88 Scuds, 46 against Saudi Arabia and 42 against Israel. In total, 74 Israelis were killed and more than 200 injured. One Saudi civilian was killed. In Saudi Arabia, 28 Americans died when a downed Scud hit their compound.

In a third phase, air strikes were directed at the now defenceless Iraqi ground forces. Large numbers of Iraqi soldiers deserted as a result. The coalition also dropped threatening leaflets warning of bomb attacks and calling for surrender. Some soldiers found their way home, others disappeared into the desert. A 14,000-strong division is said to have been reduced to a few dozen men. But Saddam Hussein showed no sign of wanting to negotiate, and Schwarzkopf became increasingly frustrated. Meanwhile, commanders reported that they were running out of things to bomb.

In mid-February, the Soviet Union sent a mediator to Iraq, who began the meeting by declaring that all Iraqi troops in Kuwait were doomed. They managed to get the dictator to agree to withdraw, but Bush

## “THE COALITION DROPPED THREATENING LEAFLETS WARNING OF BOMB ATTACKS”

now refused to accept the proposal. Then news reached the coalition that the Iraqis had started to blow up oil wells. A ground assault was inevitable.

**SCHWARZKOPF HAD KEPT** the same basic plan almost from the beginning, adding more and more units and huge amounts of supplies. Operation Desert Sabre was a three-pronged attack. In the south, marines and Arab units would move directly north towards Kuwait City. In the centre, the huge armoured VII Corps would strike a left hook at Basra, north of Kuwait City, knocking out the Republican Guard, which would probably have already encountered the Arabs and Marines. At the same time, XVIII Airborne Corps would make a more sweeping swing of nearly 400 kilometres, cutting off Kuwait and southern Iraq from the rest of the region. At least two weeks of heavy fighting and several thousand casualties were expected.


On the night of 23rd-24th February, the marines began clearing routes through huge minefields. It was slow, terrifying work, with soldiers stumbling around, dressed in protective clothing to defend ►

CORBIS/VCG/GETTY



US soldiers practise defence against chemical weapons in Saudi Arabia ahead of Operation Desert Storm. The coalition feared that Iraq would equip its missiles with chemical warheads.





Surrendering Iraqi soldiers are captured on 24th February 1991.

**“THE ASSAULT  
MET BARELY ANY  
RESISTANCE AND  
BECAME A MASSIVE  
MOTORISED MARCH”**

► against possible gas attacks. Meanwhile, US battleships fired at the beaches of Kuwait City to give the appearance of a planned landing. The USS *Missouri*, which had fired on Okinawa during the Pacific War, launched 41-centimetre shells dating from the 1930s at Iraqi positions. It was to be her last battle.

**IN THE EARLY** morning of the 24th, the marines attacked the main Iraqi defence line. The tension in Schwarzkopf's headquarters was oppressive. They were ready for gas and heavy fighting, but to everyone's surprise, hardly anything happened. The assault met barely any resistance and soon became a massive motorised march towards Kuwait City. By lunchtime, to the surprise of the marines, the war consisted of little more than avoiding getting caught up with taking too many prisoners. They simply stripped the Iraqis of their weapons, smashed

them up with the nearest armoured vehicle, offered a few sips of water and pointed out the direction south. Then they drove on. In the desert, the US VII Corps, reinforced by a British armoured division, attacked west of Kuwait. The assault was supported by massive artillery fire through huge minefields. In some places, Iraqi soldiers were buried alive by bulldozers that simply ploughed over their trenches.

What should have been two weeks of hard fighting transformed within hours into a frenzied breakthrough battle under the smoke of burning oil wells. The Iraqi units collapsed like a house of cards. They resisted at first and then surrendered or retreated. Not only had the Iraqi soldiers in many cases been without food and water for days, but when it came to combat, they were equipped with such inferior equipment that they could not even defend themselves. Thousands of prisoners





JACQUES LANGEVIN/SYGMA/SYGMA VIA GETTY IMAGES

were taken, and the greatest danger turned out to be not gas but the speed of the war, with coalition units repeatedly turning up in front of each other. In many cases, coalition soldiers were killed by friendly fire, confusing friend with foe.

Further west, XVIII Airborne Corps attacked. The far-left flank of this manoeuvre was protected by French units driving straight into the roadless desert. The target was the mighty Euphrates River, which served as a northern boundary for the area of operations. When the coalition reached the Euphrates, the Iraqis could only escape from Kuwait by the road to Basra.

**THAT AFTERNOON, SCHWARZKOPF** received reports of the successes. He faced a problem rarely discussed at military schools: what if the operation was too successful? There was a risk that in the

*Text continues on page 118* ►

## The live-broadcast war

★ It is often said that the Gulf War was the first to be broadcast live. It was the CNN news channel, in particular, that changed the media landscape with its round-the-clock broadcasts. Tracer lights against the night sky or cameras on weapons showing a bomb's path to its target became the war's trademark. In many ways, the conflict was brought closer to the wider public than ever, but it was mostly just images; reporting was no more detailed.

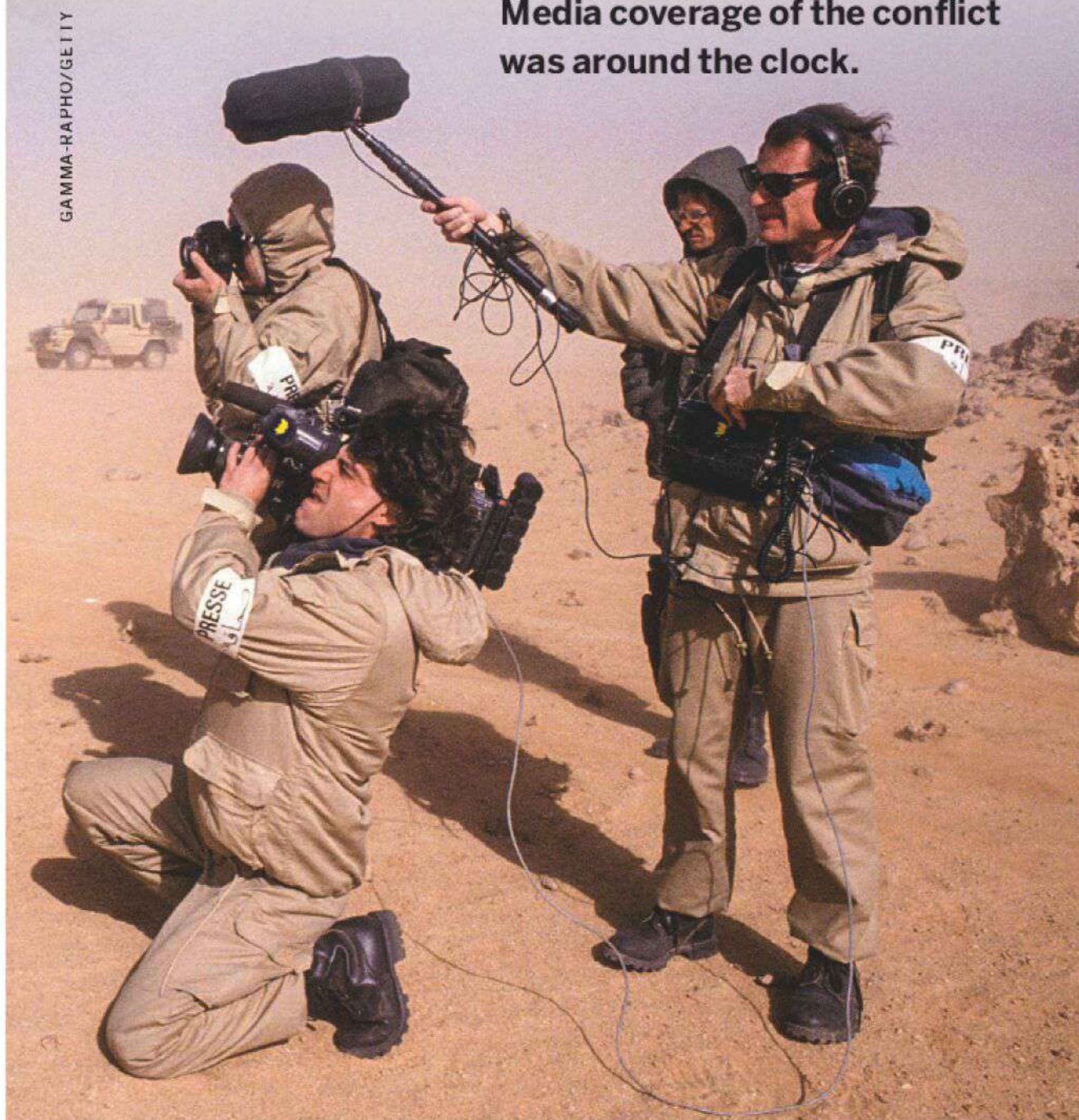
Neither Saddam Hussein nor the Gulf leaders were used to a free press. Nevertheless, CNN was allowed to broadcast fairly freely and live from the coalition attack on Baghdad, something that had never been done before. Saddam Hussein himself made bombastic speeches to the world on live television, interspersed with images of

Iraqi civilians fleeing from bombs. He had no problem with (or did not understand the implications of) mixing pictures of suffering civilians with images of badly beaten captured coalition pilots.

The US military, which had cultivated a deep suspicion of the media since Vietnam, tried to control the movement of its journalists. Schwarzkopf preferred to portray the war from daily well-directed press briefings, where he or Colin Powell could show the latest thrilling clips. They probably never reflected on how much these meetings resembled General Westmoreland's press conferences in Saigon 20 years earlier.

Thanks to live broadcasts, the war took on an almost unreal dimension of live spectacle, with soldiers seeing themselves on TV, waving to parents or learning things before their officers.

**Media coverage of the conflict was around the clock.**



GAMMA-RAPHO/GETTY



# Invasion of Kuwait

The coalition ground offensive of 24th-28th February 1991 was called Desert Storm, with Desert Sabre as its initial phase.

## OPERATIONS


→ Phase 1 and 2


→ Phase 3

→ Phase 4

## COALITION FORCES

 USA:  
697,000


 United Kingdom:  
45,400


 Saudi Arabia:  
100,000

Other countries  
in the coalition:  
11,200

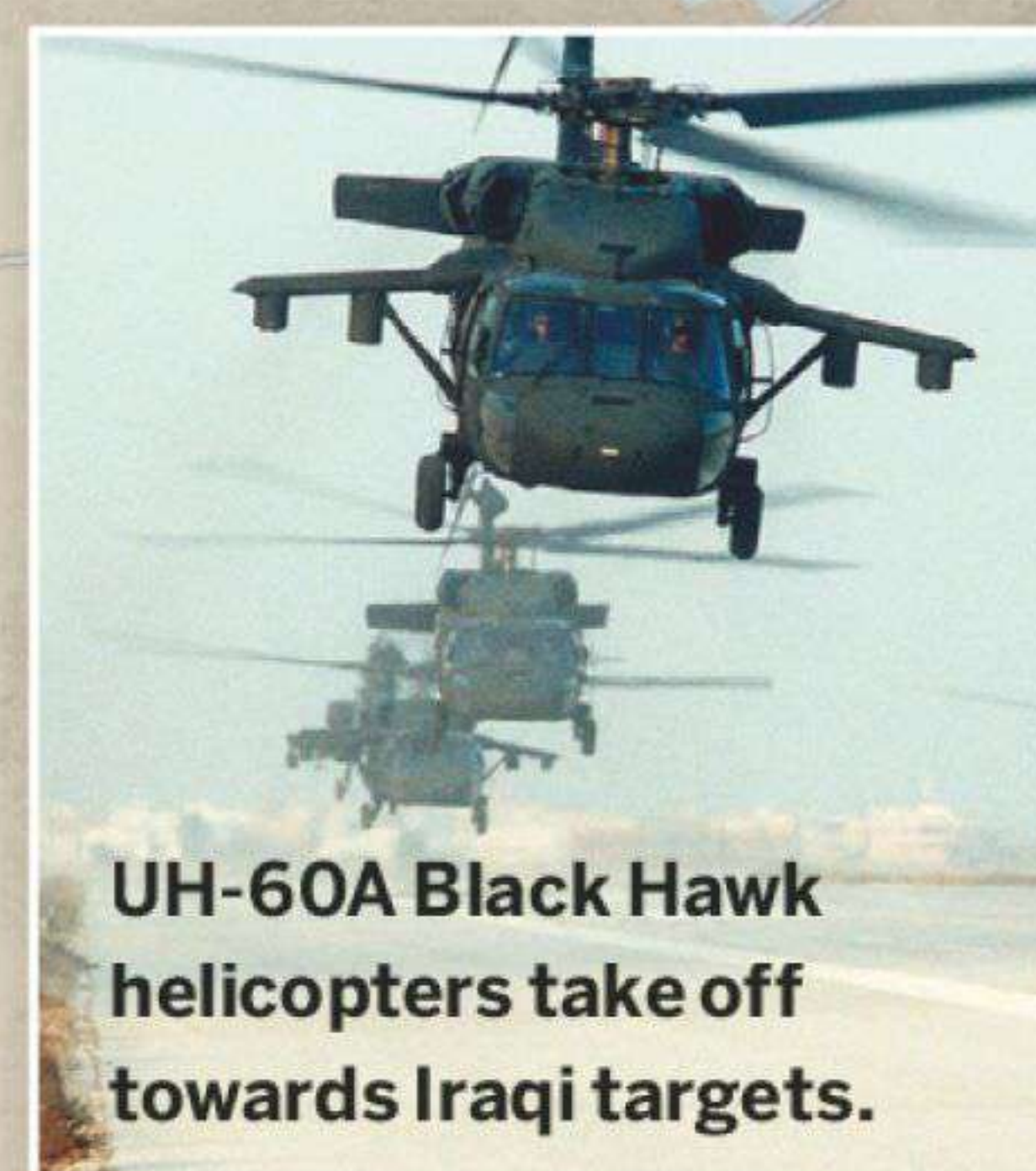
## IRAQI FORCES

 Airfields

 Infantry divisions

 Armoured divisions

 Republican Guard



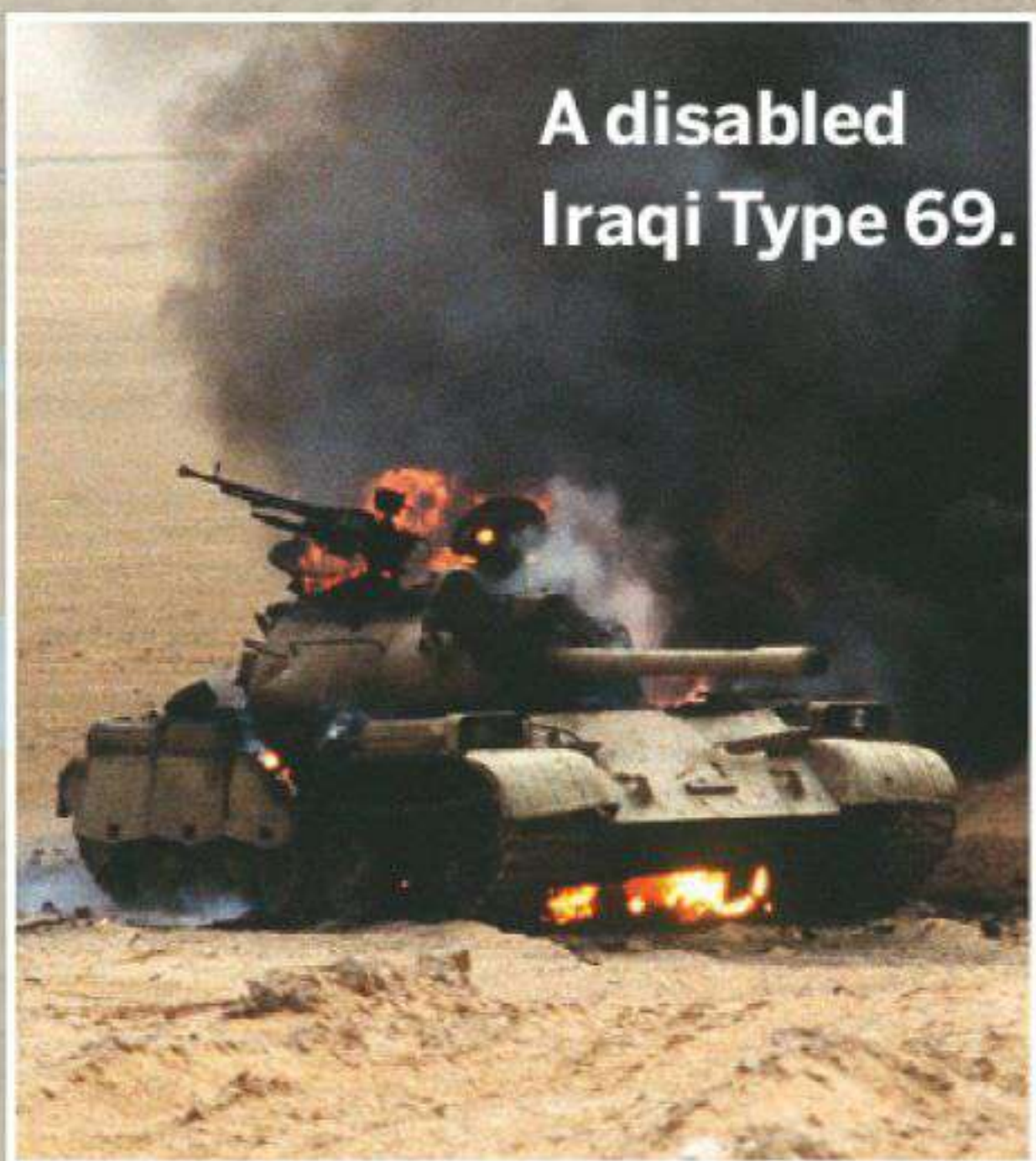
UH-60A Black Hawk helicopters take off towards Iraqi targets.

**Helicopters** Four hundred helicopters brought in 2,000 US soldiers with the mission to prevent Iraqi troops from fleeing westwards.

US snipers target Iraqi forces on 25th February 1991.







A disabled Iraqi Type 69.



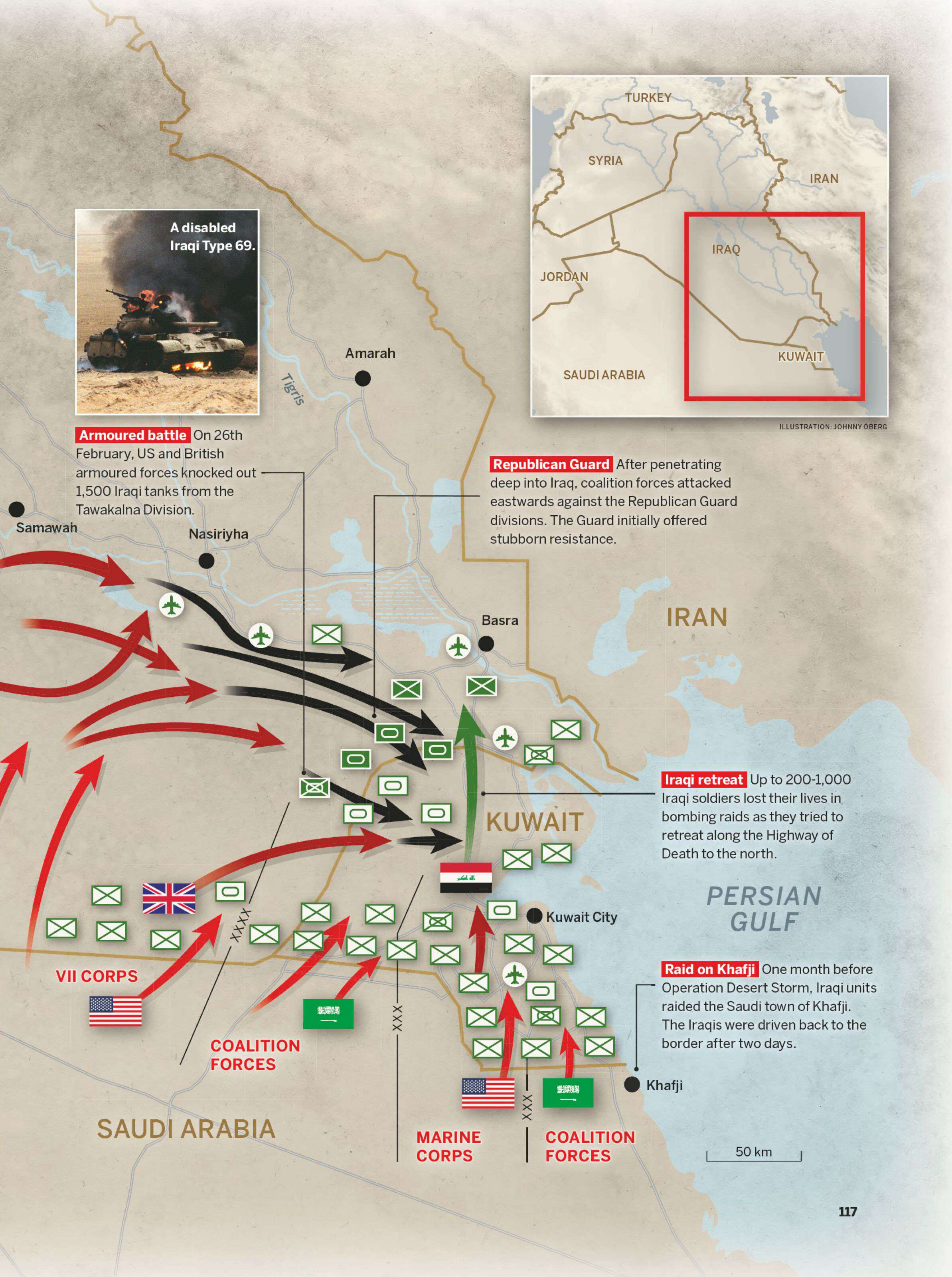
ILLUSTRATION: JOHNNY ÖBERG

**Armoured battle** On 26th February, US and British armoured forces knocked out 1,500 Iraqi tanks from the Tawakalna Division.

**Republican Guard** After penetrating deep into Iraq, coalition forces attacked eastwards against the Republican Guard divisions. The Guard initially offered stubborn resistance.

**Iraqi retreat** Up to 200-1,000 Iraqi soldiers lost their lives in bombing raids as they tried to retreat along the Highway of Death to the north.

**Raid on Khafji** One month before Operation Desert Storm, Iraqi units raided the Saudi town of Khafji. The Iraqis were driven back to the border after two days.





► general excitement, support and maintenance would be cut off, while the Republican Guard was waiting somewhere south of Basra. What if the Guard escaped the trap?

**THEN, ON THE** morning of the 25th, the marines faced a counter-attack by Iraqi armoured units. But complete air supremacy took its toll. Attack helicopters attacked the Iraqi units and the tank crews abandoned their vehicles and fled. Hundreds of Iraqi armoured vehicles were wiped out in a matter of hours.

**US M-1A1 Abrams main battle tanks from the 3rd Armored Division roll through the desert during Operation Desert Storm.**

**IN BAGHDAD, SADDAM** Hussein executed a number of his senior officers and ordered the retreat that had already unofficially begun. On the evening of the 26th, huge numbers of vehicles and soldiers crowded the road towards Basra. It was more of a flight than an organised withdrawal. When coalition aircraft caught wind of the massed targets, a full-scale massacre began. Nearly 2,000 vehicles were wiped out along what would become

## “SADDAM HUSSEIN EXECUTED A NUMBER OF SENIOR OFFICERS”

known as the Highway of Death. There are many stories about this journey to doom as the Iraqi Army was sacrificed due to its dictator's poor judgement. Scores of civilians and deserters are said to have been in the masses that swarmed north. Afterwards, the coalition found an abundance of spoils in the piles of burnt bodies and vehicles. Some units may have been using Kuwaiti civilians as human shields, but these were indistinguishable to the attack planes.

**SOUTH OF KUWAIT** City, the Free Kuwaiti units were allowed to take the lead into the city. The march into the capital was a chaos of joyous scenes and live broadcasts of bloody revenge. It's rumoured that a British TV crew drove ahead of





the coalition forces into the city in order to get the best pictures of its liberation.

Coalition armoured units rolled north-east across the desert as satellites reported that the Republican Guard was heading north. When they met, it turned out that not even Saddam Hussein's elite could stand up to the coalition's state-of-the-art armoured vehicles supported by waves of fighter jets and attack helicopters. In the massive cavalry charge of tanks, technical superiority was the deciding factor.

**IN OPEN TERRAIN,** the American M1 and British Challenger tanks had almost twice the range of the Soviet T-72. In one clash, 300 Iraqi vehicles were knocked out and a single American was killed. A Challenger set a world record in armoured combat when it took out a tank at an unimaginable 4,700 metres. The only encounter Iraq can claim to have won was due to Americans firing at each other by mistake.

In a day-long series of clashes, the US and British armoured forces demolished the Republican Guard's ►



SYGMA/GETTY

The coalition faced half-hearted resistance on the road to Kuwait City – due to technological superiority.







Injured US soldiers are evacuated by helicopter.

## Losses and wounded

★ Liberated Kuwait was stripped to the bone, although the bank accounts of the elite survived. Over a thousand Kuwaitis were killed during the occupation. Another 600 disappeared, many of them to be found in mass graves. In fact, the resistance movement in Kuwait suffered greater losses during the occupation than the coalition suffered during the fighting to liberate the country. In addition, nearly 200,000 Palestinians fled Kuwait during the Iraqi occupation and the same number were forced to leave the country after its liberation in retaliation for Yasser Arafat's support of Saddam Hussein.

Total Iraqi casualties have proved difficult to estimate. Figures of between 150,000 and 200,000 soldiers killed have been put forward, along with figures of fewer than 25,000 dead and 75,000 wounded. There are also varying estimates of the number of civilians killed, but it is probably around 3,500 and does not include Iraqis killed by their own people after the ceasefire.

One hundred and forty-eight Americans were killed in action and almost as many more died

in accidents. One in four US soldiers was killed by friendly fire. For the first time in a major conflict, since a missing pilot was found in 2009, there were no US MIAs (missing in action). Other countries together lost just under 200 soldiers. Half were Senegalese, who died in a plane crash. Almost 800 coalition soldiers were injured.

The Gulf War was the first to be discussed in terms of environmental impact. The Iraqis set fire to more than 700 oil wells in northern Kuwait, some of which burned for more than six months, causing major environmental damage. The Iraqis also released 1.3 million cubic metres of oil into the Persian Gulf, believing that the oil would prevent US landings.

Another issue that came up was US armour-piercing shells loaded with depleted uranium. These types of munitions became highly controversial and have been likened to small dirty bombs. One in three US soldiers has subsequently suffered various types of disorders, known as Gulf War Syndrome. The injuries have been blamed partly on the depleted uranium and partly on Iraqi chemical warfare agents.

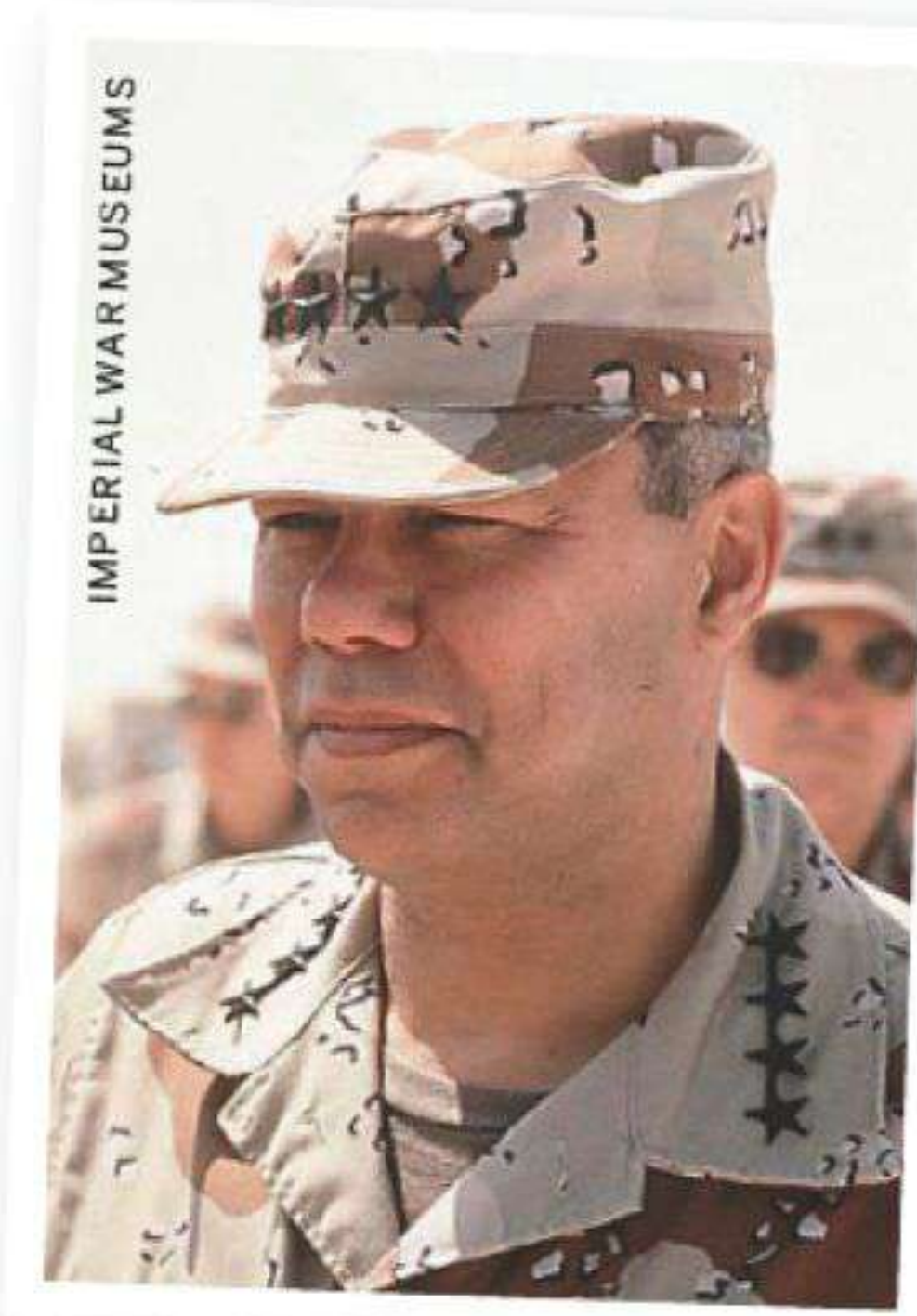
► Tawakalna division and chased a hotchpotch of fragmented armoured units before them. The fighting is considered to be the largest armoured battle the US has ever fought. In one day, nearly 1,500 Iraqi tanks were knocked out, about twice as many tanks as took part in the Eastern Front's legendary Battle of Prokhorovka. The coalition lost fewer than ten.

**THE US WAS** concerned with the fact that the fighting was degenerating into a bloodbath. The media-savvy Colin Powell suggested that the images of the Highway of Death were distasteful, and the coalition's huge technological advantage was beginning to look "un-American and unchivalrous". Early on the morning of the 28th, it was agreed to declare an armistice. Schwarzkopf protested; his trap had not yet been sprung and half the Republican Guard was getting away. But then he fell into line.

One hundred hours after the ground attacks began, President Bush went on television and declared Kuwait liberated. An excited Western press spoke of the "100-hour war" and elevated Schwarzkopf to the status of a military genius. In Iraq, the news of the ceasefire relieved Saddam Hussein. The battle was over, he was still in power and a third of his Guard had escaped.

In the long run, it was perhaps a mistake not to let the fighting continue for another day. Much of Saddam Hussein's core troops had escaped and could provide the power base he needed to survive as leader and quell the insurgency that would soon flare up in Iraq. At the same time, the coalition had no mandate to remove Iraq's dictator and an invasion deeper into the country might cause it to collapse. Many US leaders repeated over and over again that if they went into Iraq in earnest, they would not leave for many years. It was a point that George W Bush seemed to have completely forgotten ten years later.

**THE COALITION LAUNCHED** Operation Desert Farewell and began evacuating Iraq. In their wake, anarchy broke out. Shia Muslims in southern and eastern Iraq rebelled against Saddam Hussein, partly fuelled by the CIA's Voice of Free Iraq radio broadcast. The uprisings were quelled by troops who had just escaped from Kuwait. Tens of



Commander-in-chief Colin Powell.





GAMMA-RAPHO/GETTY

## “KURDS IN NORTHERN IRAQ ALSO REBELLED, URGED ON BY THE US”

thousands of Iraqis were killed and the murders were televised, while half a million soldiers sat a few kilometres away, cleaning 140,000 vehicles as though they had just completed a major exercise.

**THE KURDS IN** northern Iraq also rebelled, likewise urged on by the United States, but without real support. Kurdistan almost gained independence at the end of March, but an Iraqi offensive displaced one and a half million Kurds. The US tried to avoid interfering, but again fear of how things looked on TV forced relief efforts, backed by the US military. What followed was a long and complicated conflict that permanently established Iraqi Kurdistan as a semi-autonomous entity under US protection.

At the same time, Emir Al-Sabah was reinstated as de facto dictator of Kuwait. For appearances' sake, a parliament was established, which the

emir abolished a few years later. He also took the opportunity to expel the Palestinians he considered disloyal during the occupation. Clearing the enormous minefields and extinguishing all the burning oil wells would, over the next few years, employ scores of Western experts using manpower from poorer Arab countries.

**THE DESERT FAREWELL** rolled on. The US left some troops in Saudi Arabia, but most were shipped home – in many cases only to return a few years later. Sanctions against Iraq remained in place. The country suffered from hyperinflation and was ravaged by disease, because the bombing had destroyed much of the country's water supply.

On 10th June, victory parades were held in New York. The US media said that the dishonour of Vietnam had been buried. However, there was still the fact that Saddam Hussein had not been completely defeated and nothing had been done to spread democracy and human rights. Margaret Thatcher later pointed out that both she and George Bush were voted out after the war. But Saddam Hussein remained. 🇺🇸

**Anders Fager** is a writer on military history.

**The devastation of the US Air Force massacre along the Highway of Death between Kuwait City and Basra.**



# 20TH CENTURY DESERT WARFARE

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**Bringing History to Life is published by:**

Bonnier Publications International AS,  
PB 543, 1411 Kolbotn, Norway.

**ISSN:** 2445-6659

**Printed by:** Poligrafijas Grupa Mukusala, Latvia

**Marketing/Distribution UK and Export:**

Marketforce (UK), 3rd Floor, 161 Marsh Wall,  
Canary Wharf, London E14 9AP

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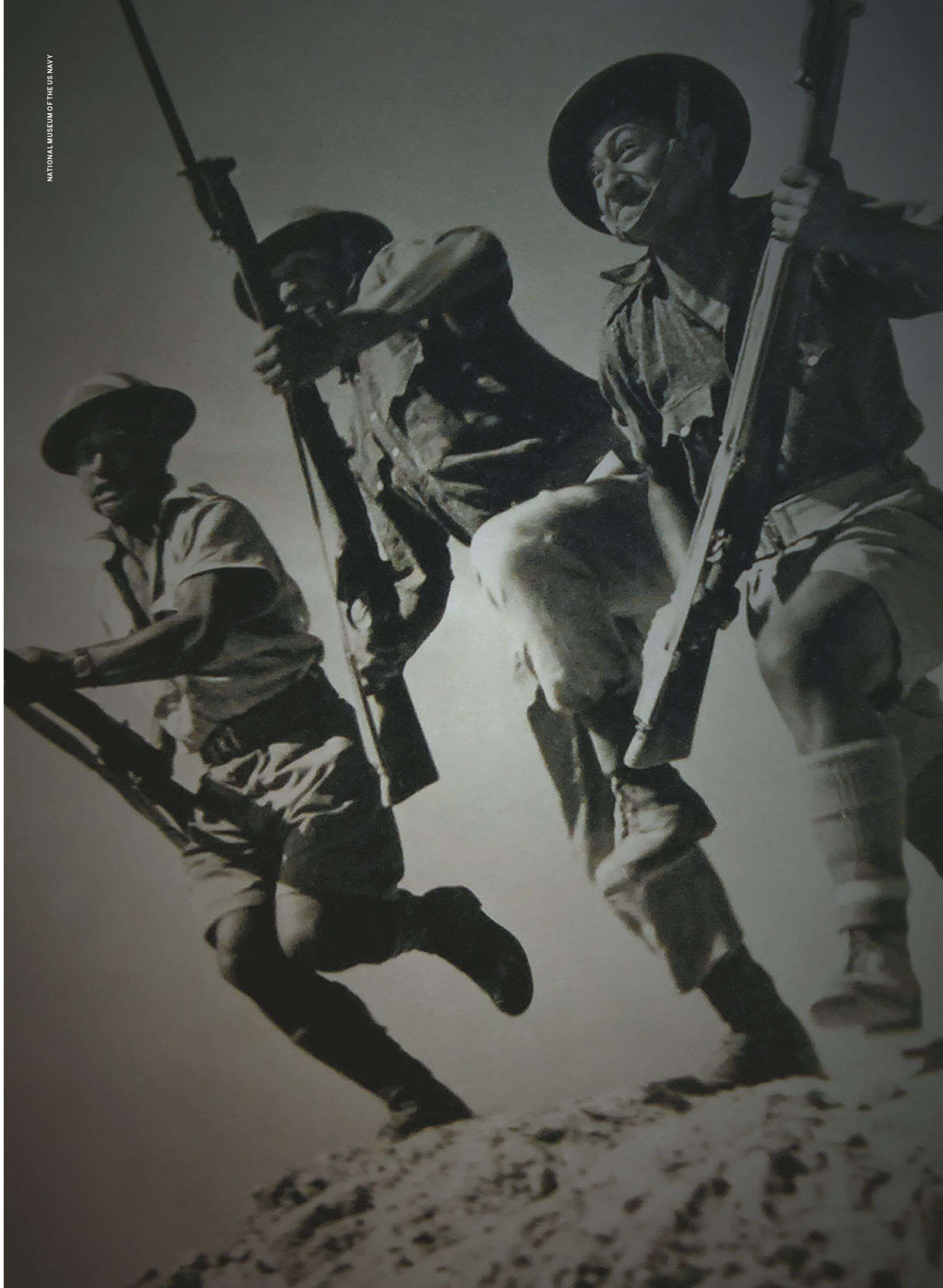


Printed matter  
3041 0876

**BONNIER**  
Publications International

**Cover:** Fairfax media/Getty







# 20TH CENTURY DESERT WARFARE



## The Desert Fox

German panzer commander Erwin Rommel became famous for his ingenuity on the battlefield.



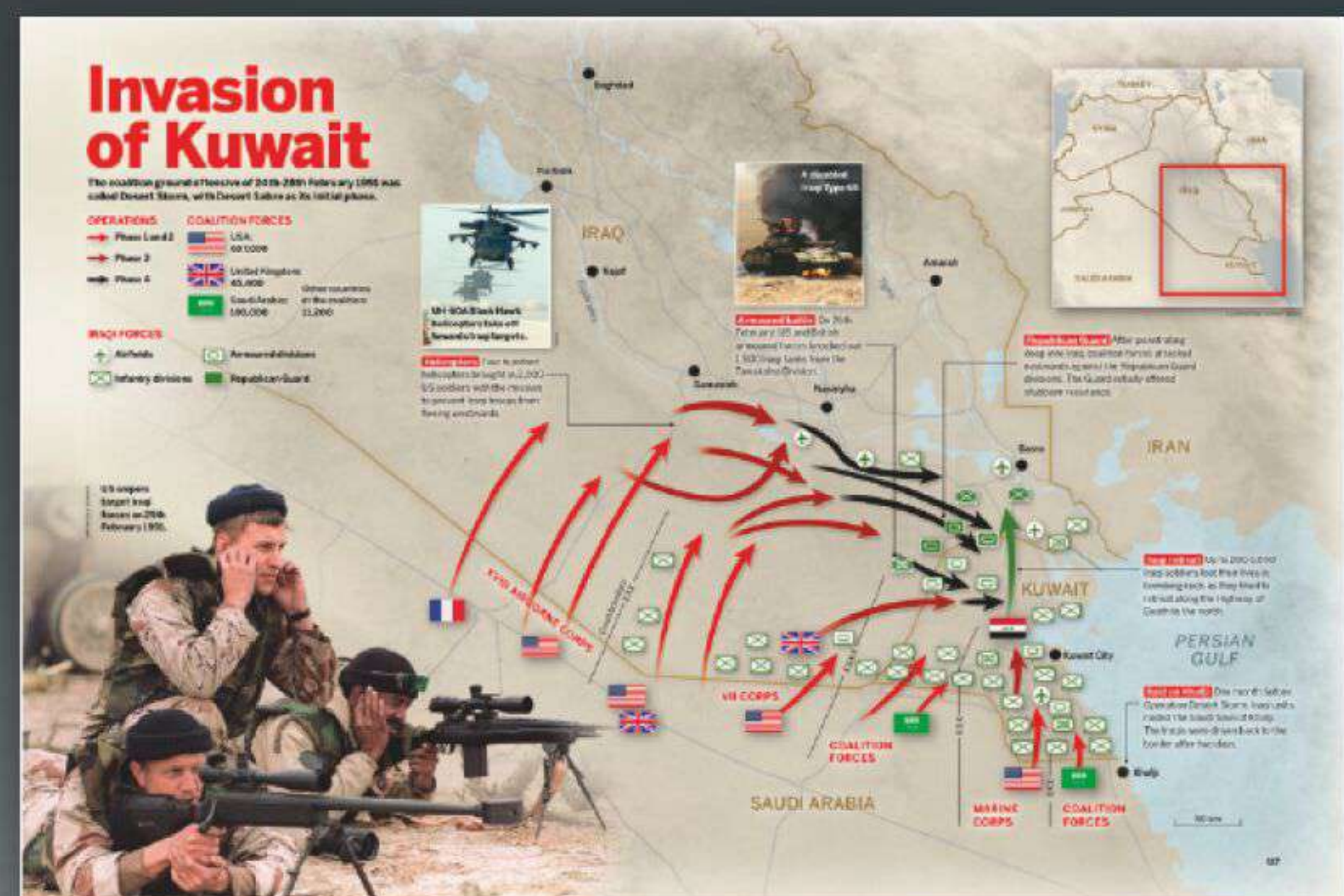
## World War II in North Africa

The deserts of Libya, Egypt, Algeria and Morocco became some of the worst battlefields of WWII.



## Battles that shaped the Middle East

Israel surprised its neighbours in 1967 with extensive attacks both on land and in the air.



## Operation Desert Storm

US forces surprised themselves at how technically superior they were to Saddam Hussein's forces.

